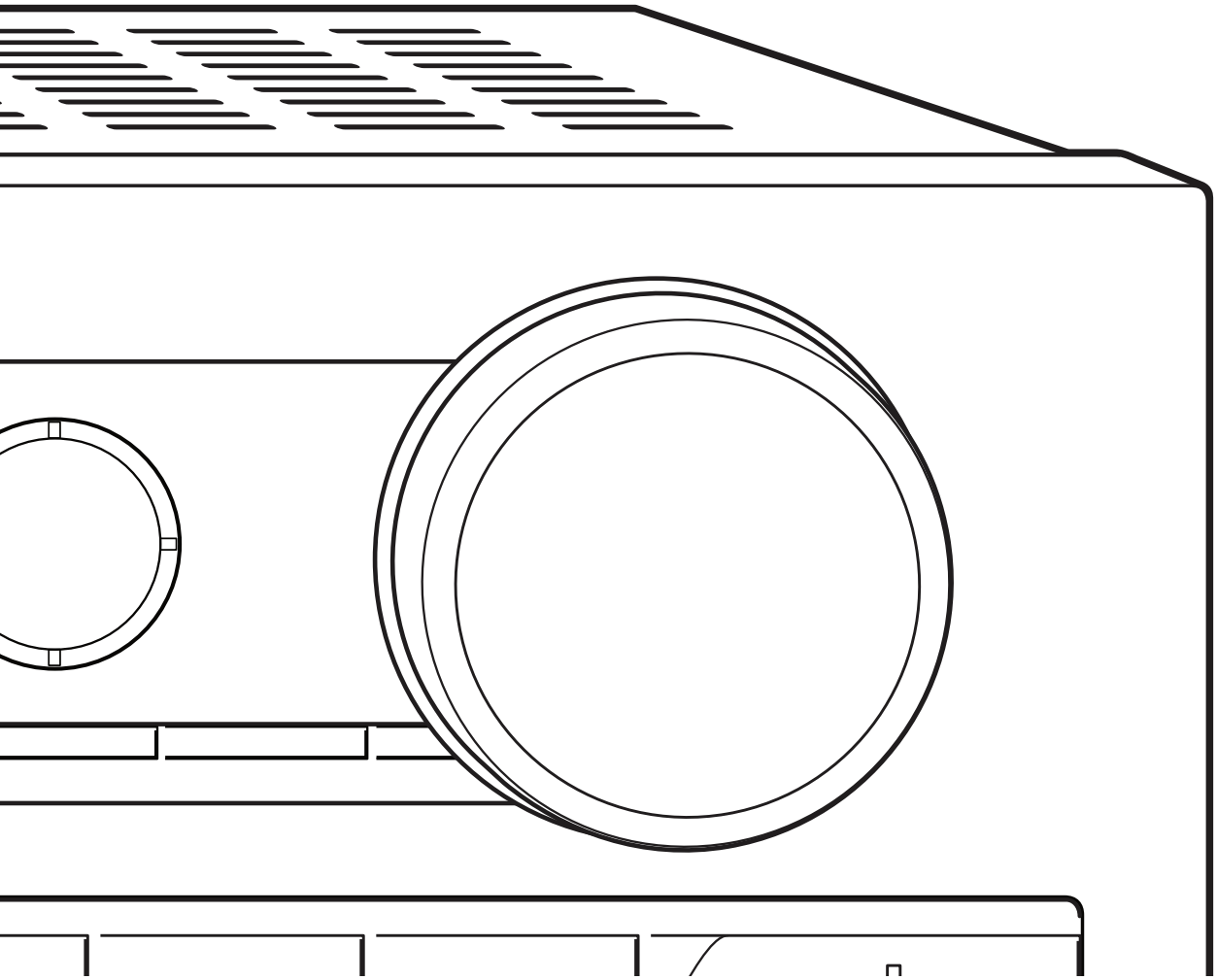
ONKYO

TX-NR737

AV RECEIVER



Basic Manual

■ Advanced Manual found here

http://www.onkyo.com/manual/txnr737upg/adv/en.html

En

Before Start

About the Basic Manual

The Basic Manual leads you through the fundamental steps to enjoy the AV Receiver from connections to TV, speaker system and playback components, to necessary functions for playback. As well as that, Basic Manual informs you with the instructions on frequently used functions. Besides, there is another part of the manual called Advanced Manual to inform you with more detailed information, which we have decided to publish on the web from the ecological point of view.

Advanced Manual

Advanced Manual is always updated with the latest information and its user friendly interface, which does not matter whether you access from PC or Smartphone, helps you to understand more deeply about the AV Receiver. Advanced Manual is consisted of the following chapters.

- AM/FM Radio Receiving Function
- Playing Music Files on a USB Storage Device
- Listening to Internet Radio
- Playing Music with DLNA
- Playing Music Files in a Shared Folder
- Operating Music Files with the Remote Controller
- Listening Mode
- Advanced Settings
- Operating Other Components with the Remote Controller
- Advanced speaker connections
- Connecting and Operating Onkyo RI Components
- Firmware Update
- Troubleshooting
- Reference Information

Advanced Manual found here
http://www.onkyo.com/manual/txnr737upg/adv/en.html

Features

- Equipped with 7 channel amplifier
- Supports playback in Dolby Atmos format which provides 360-degree placement and movement of sounds including overhead sound
- Dolby Surround listening mode expands 2 ch, 5.1 ch or 7.1 ch source to available speaker configurations
- THX Select2 Plus certified
- Incorporates Qdeo™ technology for HDMI video upscaling
- Equipped with 4K/60 Hz Passthrough-compatible HDMI IN/OUT jacks (IN1 to IN4 of HDMI IN jacks are 4K compatible)
- Supports the HDMI Through function which allows transmission from playback devices to the TV in standby state
- Supports HDCP2.2, a strict copy-protection for providing high quality content (HDMI IN3/HDMI OUT MAIN only)
- Supports ARC (Audio Return Channel)
- Supports USB storage playback
- Supports variety of network functions such as Internet Radio, DLNA, etc.
- Supports Wi-Fi, Bluetooth and MHL-enabled mobile device
- Bi-Amping capability
- A/V Sync Control Function to correct deviation of audio and video
- Multi-zone function which allows you to play a different source in another room from the main room
- 32 bit DSP (Digital Signal Processor) with excellent calculation performance
- Music Optimizer™ for Compressed Digital Music files
- Phase Matching Bass System
- Automatic speaker setup available using supplied calibrated microphone (AccuEQ Room Calibration)
- Supports playback of MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, Apple Lossless, DSD, Dolby TrueHD via network and USB storage device (the supported formats will differ depending on the use environment)

Supplied Accessories

Indoor FM antenna --- (1)

AM loop antenna --- (1)

Color labels for speaker cable --- (1)

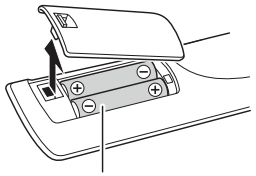
Remote controller (RC-882M) --- (1)
Batteries (AA/R6) --- (2)

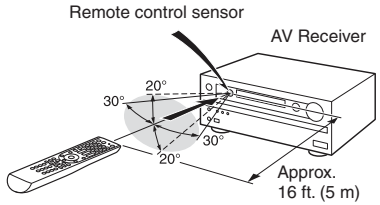
Power cord
(European and Taiwanese models) --- (1)

Speaker setup microphone --- (1)

∗ The number in parenthesis indicates the quantity. On packaging, the letter at the end of the product name indicates the color.

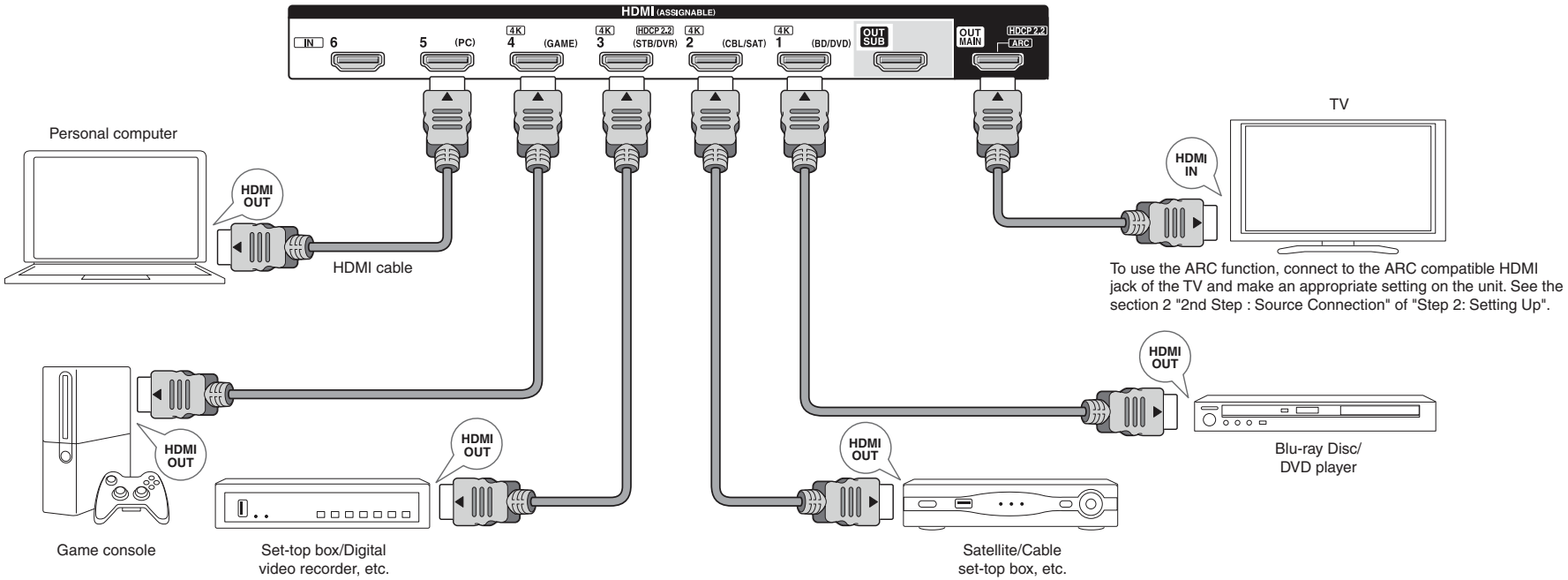
How to use the remote controller





∗ If you do not use the remote controller for a long time, remove the batteries to prevent leakage.
∗ Note that keeping consumed batteries inside may cause corrosion resulting in damage of the remote controller.

Step 1: Connections


HDMI (ASSIGNABLE)
IN 6
5 (PC)
4K 4 (GAME)
4K HDCP 2.2 3 (STB/DVR)
4K 2 (CBL/SAT)
4K 1 (BD/DVD)
OUT SUB
OUT MAIN
HDCP 2.2 ARC
Personal computer
HDMI OUT
HDMI cable
TV
HDMI IN
To use the ARC function, connect to the ARC compatible HDMI jack of the TV and make an appropriate setting on the unit. See the section 2 "2nd Step : Source Connection" of "Step 2: Setting Up".
HDMI OUT
Blu-ray Disc/ DVD player
HDMI OUT
Game console
HDMI OUT
Set-top box/Digital video recorder, etc.
HDMI OUT
Satellite/Cable set-top box, etc.

1 Connecting the TV and players

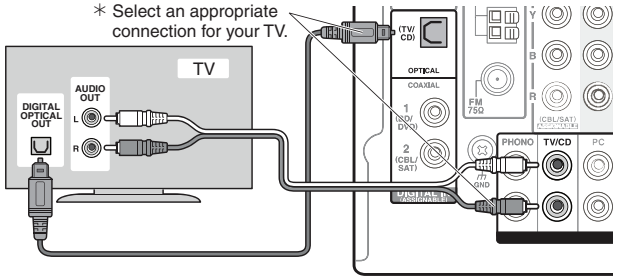
Important: The power cord must be connected only after all other connections are completed.

HDMI cable connection

The unit has many HDMI jacks on its rear panel and each of them corresponds to an input selector button of the same name on the front panel. For example, a Blu-ray Disc player will be connected to the HDMI IN1 jack and the BD/DVD button on the front panel will be used to listen to the playback sound (if the player is CEC compliant, input will be switched automatically). If you add another Blu-ray Disc player, you can use any other jack than HDMI IN1. It is possible to change assignment of the input jacks and input selector buttons. For how to make settings, see the Advanced Manual.

To connect the TV and the unit, connect the HDMI OUT MAIN jack of the unit and the HDMI IN jack of the TV using an HDMI cable. With this connection, it becomes possible to display the setting screen of the unit on the TV or transmit video/audio signals from the player to the TV. If your TV supports ARC (Audio Return Channel), it is possible to play the TV sound with the AV receiver's speakers with this connection only. If your TV does not support ARC, you need, in addition to the HDMI OUT MAIN jack connection, a digital optical cable connection between the digital audio out optical jack of the TV and the DIGITAL IN OPTICAL jack of the unit or an analog audio cable connection between the audio output jack of the TV and the VIDEO/AUDIO IN TV/CD jack of the unit.

● Audio connection with a TV not supporting ARC



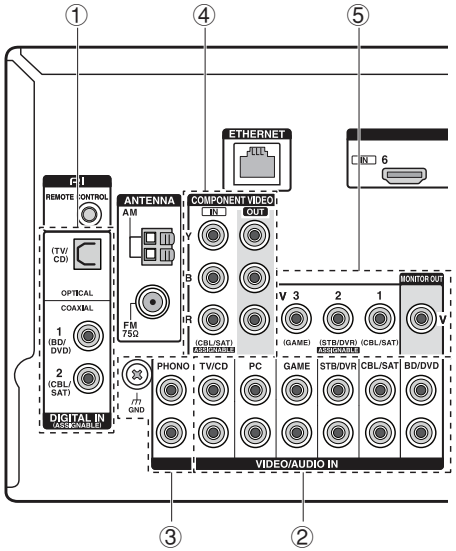
Another TV can be connected to the HDMI OUT SUB jack. In this case, change the setting accordingly. You can set up by viewing the guidance displayed on the TV screen. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. Press RCV and then HOME on the remote controller, select

"Setup" - "1. Input/Output Assign" - "Monitor Out" and set the default value of "MAIN" to "SUB" or "MAIN+SUB".
The unit supports the HDMI Through function that allows transmission from players to the TV even if the unit is in standby. You have to modify the settings to enable the input selection link with CEC compliant device, connection with ARC compatible TV, and HDMI Through function. See the section 2 "2nd Step : Source Connection" of "Step 2: Setting Up".

- To enjoy HDCP2.2 protected video, connect the player to the HDMI IN3 jack and the TV to the HDMI OUT MAIN jack of the unit. Your player and TV need to support HDCP2.2.
- To play 4K or 1080p video, use the high speed HDMI cable.
- It is possible to send video and audio of an MHL-enabled mobile device by connecting the MHL-enabled mobile device to the AUX INPUT HDMI/MHL jacks on the front panel.

Connecting Components without HDMI

If your AV component does not have HDMI jack, use an available jack of your component for cable connection with this unit. Just as the HDMI jacks, other jacks on this unit have a preassigned input selector button on the front panel. See the name of the input selector button shown with the jack when connecting the device.



■ Audio signal connection

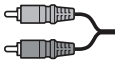
① **Digital connection**: Use a digital optical cable (OPTICAL) or digital coaxial cable (COAXIAL) for connection with a player.

Digital optical cable (OPTICAL)

∗ As the digital in optical jack of the unit has a cover, push in the cable against the cover as it is turned inside.

Digital coaxial cable (COAXIAL)

② **Analog connection**: Use an analog audio cable for connection with a player.
To enjoy multi-zone playback of audio of a CD player or such other player without HDMI output jack, you need to use the RCA cable to connect the corresponding jacks of the player and this unit. For details on the multi-zone function, see the section 6 "Using the multi-zone function" of "Step 3: Playing Back".



Analog audio (RCA) cable

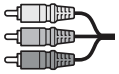
③ **Connection with turntable**: If it uses an MM type cartridge and does not have a built-in audio equalizer, connect it to the ③ PHONO jack. If the connected turntable has a built-in audio equalizer, connect it to the ② TV/CD jack.

∗ If it uses an MC type cartridge, install an audio equalizer compatible with MC type cartridge between the unit and the turntable by connecting it to the ② TV/CD jack. For details, refer to the turntable's instruction manual.
∗ If the turntable has a ground wire, connect it to the GND terminal of this unit. If connecting the ground wire increases noise, disconnect it.

■ Video signal connection

The unit has a video upconversion function. For details, see the next section.

④ Use a component video cable to connect a TV with component video input jacks and a player with component video output jacks.



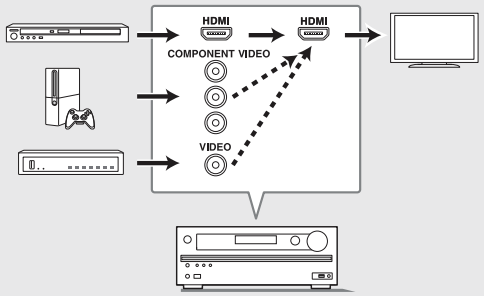
Component video cable

∗ Its transmitted video has higher quality than that of composite video cable.

⑤ Use a composite video cable to connect a TV with composite video input jack or a player with composite video output jack.

Composite video cable

Video signals input to the composite video input jack or the COMPONENT VIDEO IN jacks will be upconverted to HDMI signals and then output from the HDMI output jack.
Note that it is not possible to convert digital audio input signals to analog or vice versa.

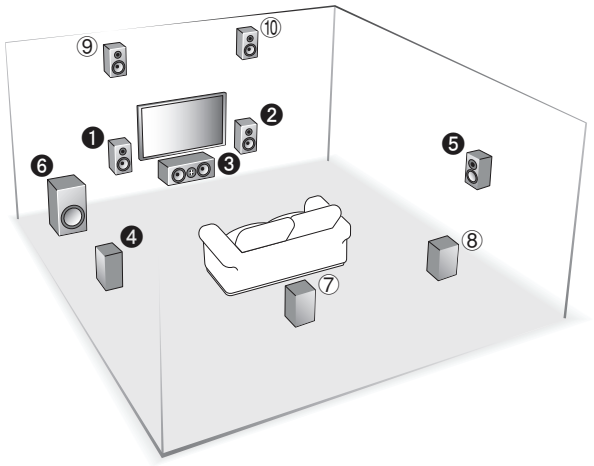


AV Receiver

∗ When you upconvert video signals input to the COMPONENT VIDEO IN jacks and output them from the HDMI OUT jack, set the output resolution of the player to 480i or 576i. If the input has 480p/576p or higher resolution, a message prompting you to change the resolution setting will appear. If your player does not support 480i or 576i output, use the composite video jack.
∗ If multiple video signal inputs are put into one input system, the output will be made in the order of HDMI, COMPONENT VIDEO, and composite video.

2 Connecting speakers

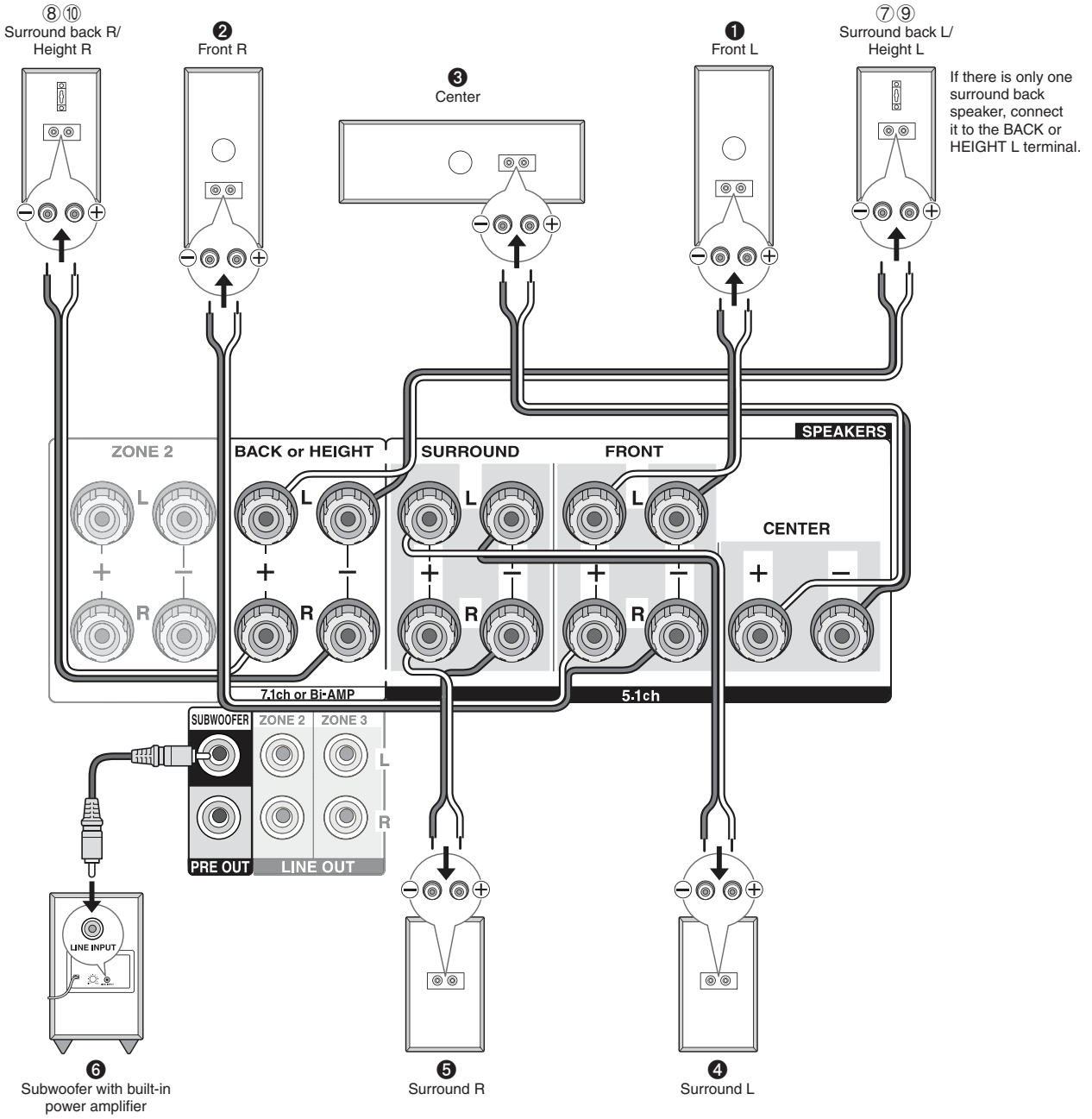
Speaker layout



To enjoy the Dolby Atmos listening mode, Surround back speakers or Height speakers need to be installed. The example above uses front Height speakers. As other types of Height speakers are also applicable, see the next page for details.

❶❷ Front speakers
❸ Center speakers
❹❺ Surround speakers
❻ Subwoofer
⑦⑧ Surround back speakers
⑨⑩ Height speakers

- 5.1 ch: ❶❷❸❹❺❻
- 7.1 ch: ❶❷❸❹❺❻ + ⑦⑧ or ❶❷❸❹❺❻ + ⑨⑩
  ⑦⑧ and ⑨⑩ share the same speaker terminals. Select either of the groups.
- To use the multi-zone function, see the section 6 "Using the multi-zone function" of "Step 3: Playing Back".



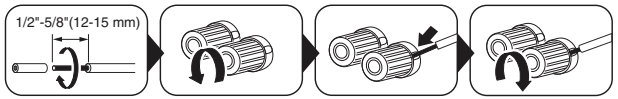
Characteristics of speaker types

❶❷ output front stereo sound. ❸ outputs center sounds such as dialogs and vocals. ❹❺ create back sound field. ❻ reproduces bass sounds and creates rich sound field.

Connecting ⑦⑧ speakers or ⑨⑩ speakers enables playback in 7.1 ch configuration. ⑦⑧ speakers improve sense of envelopment created by back sound field as well as seamlessness of back sounds, providing more natural sound experiences in the sound field. ⑨⑩ speakers produce surround effects on a height plane. This unit performs optimal sound field processing for the type of the installed height speakers which is registered in initial settings (with setup wizard).

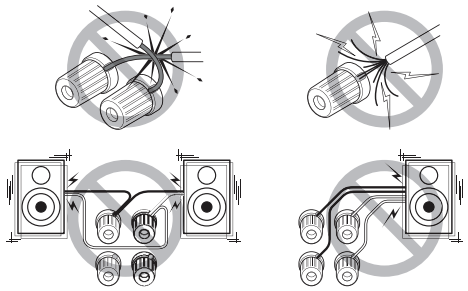
Instructions on how to connect speakers

Important: Connect speakers with 4 Ω to 16 Ω impedance. You have to change the setting if any of the speakers have 4 Ω or more to less than 6 Ω impedance. You can set up by viewing the guidance displayed on the TV screen. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN. Press RCV and then HOME on the remote controller. Select "Setup" - "2. Speaker Setup" - "Speaker Settings" - "Speaker Impedance" and change the default value from "6ohms" (Default Value) to "4ohms".

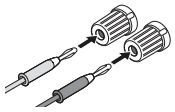


Cut and remove the plastic coating from the end of the speaker cable, twist the core and connect it to the terminal. Make correct connection between the unit's jacks and speaker's jacks (+ to + and – to –) for each channel. If connection is wrong, a bass sound may become poor due to reverse phase. Attaching the supplied colored speaker cable labels to the + side on the both ends of each channel's cable will help correct connection.
Up to two subwoofers with built-in power amplifier can be connected to the subwoofer jacks. Set the cut-off filter selection switch of the subwoofer to DIRECT. If the subwoofer does not have a cut-off filter selection switch but has a cut-off frequency adjusting dial, turn it to the maximum frequency. If your subwoofer does not have builtin power amplifier, you can connect a power amplifier between the unit and the subwoofer.

- The speaker setting is 7.2 ch at the time of purchase. You can change it manually or by using automatic speaker setting.
- Short-circuiting the + cable and – cable or contacting the cable core to the rear panel of the unit may cause failure. Also do not connect two or more cables to one speaker terminal or one speaker to several terminals.
- Using a speaker with less impedance than the setting may result in failure.



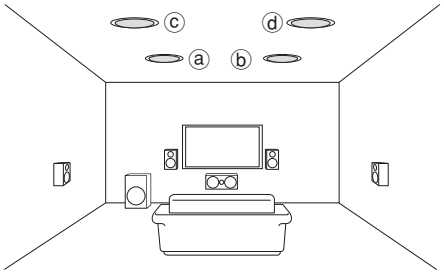
When using commercially available banana plugs: Tighten the speaker terminals to the end and then insert the banana plugs. Do not insert the core of speaker cable directly into the hole for banana plug of speaker terminal. (North American models)



Height speakers arrangements

Dolby Laboratories recommends to place the speakers as described on “Installing speakers in ceiling” to obtain the best Dolby Atmos effect.

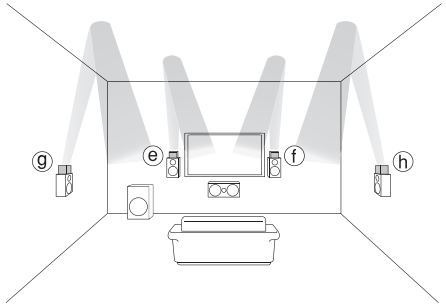
Installing speakers in ceiling



ⓐ ⓑ Top Front
ⓒ ⓓ Top Middle

Ceiling speakers, etc. are used for maximizing effects in Dolby Atmos or Dolby Surround listening mode. Install Top Front speakers midway between the position just above the listening position and the position just above the front speakers. Install Top Middle speakers just above the listening position. You can select ⓐⓑ or ⓒⓓ on the unit. For connection with the unit, use the SPEAKERS BACK or HEIGHT terminals.

Using Dolby Enabled Speakers



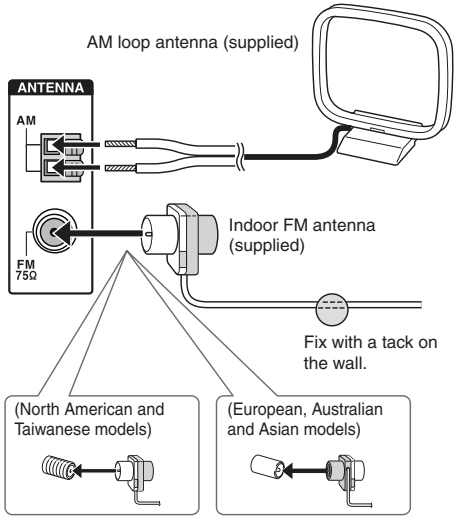
ⓔ ⓕ Dolby Enabled Speaker (Front)
ⓖ ⓗ Dolby Enabled Speaker (Surround)

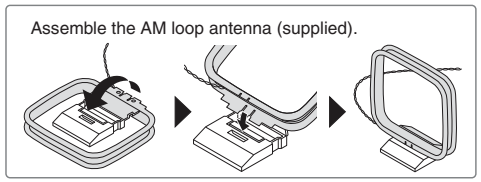
A Dolby Enabled Speaker is specially designed to be used as a Height speaker. There are two types of Dolby Enabled Speakers, the one is to be placed on the top board of other speakers such as front speakers and surround speakers, and the other is integrated type with the normal speakers. Dolby Enabled Speakers designed with their output facing toward the ceiling to create an elevated audio effect in the Dolby Atmos and Dolby Surround listening modes by providing sounds echoing off the ceiling. You can select ⓔⓕ or ⓖⓗ on the unit. For connection with the unit, use the SPEAKERS BACK or HEIGHT terminals.

3 Other connections

AM/FM antenna connections

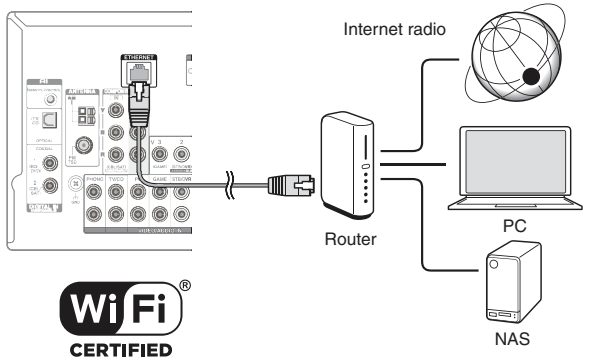
Connect the antennas to listen to AM/FM broadcast. When listening to the broadcast for the first time, adjust the antenna position and orientation to get the best reception.





Network connection

You can enjoy Internet radio and DLNA by connecting the unit to LAN. The unit can be connected to the router with an Ethernet cable or to the wireless LAN router with Wi-Fi connection. In case of wired connection, connect the Ethernet cable to the Ethernet port. See the section 2 "4th Step : Network Connection" of "Step 2: Setting Up".



Headphones connection

Connect stereo headphones with a standard plug (1/4 inch or ø 6.3 mm) to the PHONES jack on the front panel. Sound from the speakers will be off while you are using the headphones.

- If you selected any other listening mode than Pure Audio (European, Australian and Asian models), Stereo, Mono and Direct, connecting headphones will switch the listening mode to Stereo.

Step 2: Setting Up

Important: When the unit is turned on for the first time, the setup wizard of the section 2 will automatically be launched. If you use the setup wizard to make the initial setup, connect a TV to the HDMI OUT MAIN jack of the unit via HDMI connection.

1 Turning the power on

Connect the power cord to the outlet. Press ⏻ON/STANDBY on the main unit or ⏻RECEIVER on the remote controller to turn the unit on or to standby mode.

∗ European and Taiwanese models include a removable power cord. Connect the power cord to AC INLET of the unit and then connect to the outlet. Always disconnect the outlet side first when disconnecting the power cord. When the unit is turned on, a large instantaneous current may flow affecting functionality of the computer and other devices. It is recommended to use a separate outlet from that for the computer or such other sensitive devices.

Firmware update notification: If the unit is connected via LAN and there is firmware update available, the "Firmware Update Available" message will appear. To execute updating, select "Update Now" with the cursor buttons of the remote controller and press ENTER. When "Completed!" appears, press ⏻ON/STANDBY on the main unit to turn the unit into standby mode. Then updating will be completed.

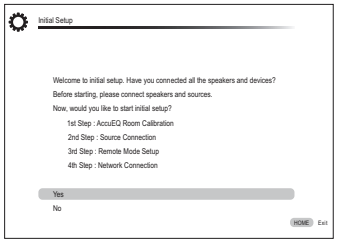
- The unit automatically turns itself into standby mode 3 minutes after "Completed!" appears on the display. In this case also, updating will be completed.

2 Making the Initial Setup with the Setup Wizard

Read before starting the procedure: Set up by answering the guidance displayed on the TV screen. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN.

- If you terminate the procedure on the way or change the setting made in the initial setup and want to call up the setup wizard again, press RCV and then HOME on the remote controller, select "Setup" - "7. Hardware Setup" - "Initial Setup", and press ENTER.

Select the language first. In the next screen, the summary of the setup wizard as below will be displayed. Select "Yes" in this screen and press ENTER on the remote controller.


Initial Setup
Welcome to initial setup. Have you connected all the speakers and devices?
Before starting, please connect speakers and sources.
Now, would you like to start initial setup?
1st Step : AccuEQ Room Calibration
2nd Step : Source Connection
3rd Step : Remote Mode Setup
4th Step : Network Connection
Yes
No
HOME Exit

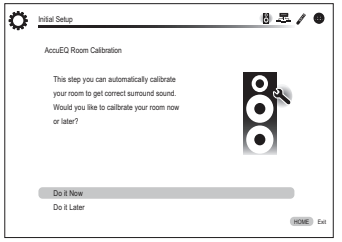
The setup wizard proceeds in the four steps as below.

- ■ 1st Step : AccuEQ Room Calibration
- ■ 2nd Step : Source Connection
- ■ 3rd Step : Remote Mode Setup
- ■ 4th Step : Network Connection

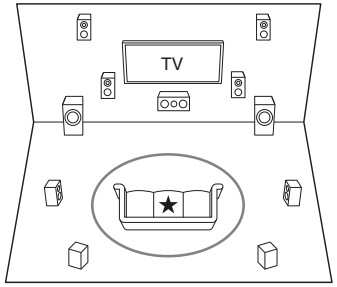
■ 1st Step : AccuEQ Room Calibration

The test tone coming from each speaker will be measured to enable setting of the number of speakers, volume level, each speaker's optimum crossover frequencies, and distance from the primary listening position, and also enable correction of distortion caused by the room acoustic environment.

- You cannot return to the previous screen during speaker setup, even if you press RETURN.


Initial Setup
AccuEQ Room Calibration
This step you can automatically calibrate your room to get correct surround sound.
Would you like to calibrate your room now or later?
Do it Now
Do it Later
HOME Exit

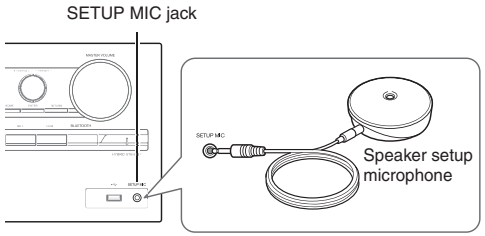
1. Place the speaker setup microphone.
When the start screen above is displayed, before starting the procedure, place the supplied speaker setup microphone at the measurement position ★ by referring to the figure below.



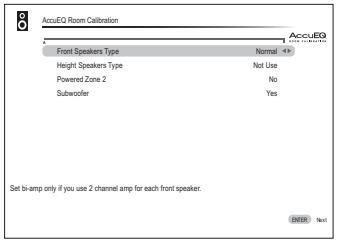
◯ : Listening area ★ : Measurement position with microphone

∗ Correct measurement will not be possible if the microphone is held by hand. Measurement is not possible if headphones are being used.
∗ The subwoofer sound may not be detected since it is extremely low frequencies. Raise the subwoofer volume to around the half of its maximum volume and make its frequency to the maximum level.
∗ A loud test tone will be heard during measurement. Measurement may be interrupted if there is ambient noise or radio frequency interference. Close the window and turn off the home appliance and fluorescent light.

2. **After placing the microphone at the measurement position, select "Do it Now" with the cursors and press ENTER.**
3. **When "Please plug microphone that came in a box with AV receiver." is displayed, connect the microphone to the SETUP MIC jack of the unit.**



4. **Follow the guidance displayed on the TV screen.**



When the screen above is displayed, set the items with the cursors on the remote controller. Select the types for height speakers if the height speakers are used. Confirm the power supply of subwoofer and press ENTER on the remote controller in the next screen. Confirm the position of speaker setup microphone and press ENTER on the remote controller in the next screen.

- When the cursor is on an item, the content of the item will be shown on the lower left of the screen.

5. **The test tones sound from the connected speakers and automatic speaker setting starts.**
   Measurement will be made twice for each speaker. It takes several minutes to be completed. Keep the room as quiet as possible during measurement. If any of the speakers do not produce the test tone, check for disconnection.
   - During measurement, each speaker outputs the test tones at a high volume. Be careful of sound leak that may disturb your neighbors, or be careful not to frighten young children.
6. **When the measurement is completed, the measurement result is displayed.**
   Press ◄/► on the remote controller to check the settings. Press ENTER with "Save" selected. In the next screen showing that "AccuEQ Room Calibration" is "On", press ENTER on the remote controller.
   - If there is an error message, follow the on-screen instruction to remove the error cause.

About THX playback
THX recommends setting the speakers manually if you use THX-certified speakers or playing back with THX listening modes.

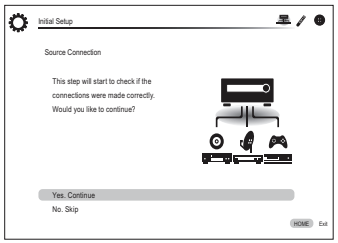
- THX recommends setting the crossover frequency to “80Hz(THX)” manually.
- Due to the electrical complexities and the interaction with the room, you may notice irregular results when setting the level or distance of each speaker. If this happens, THX recommends setting the speakers and the subwoofer manually.

7. **When "Please unplug setup microphone." is displayed, disconnect the microphone.**

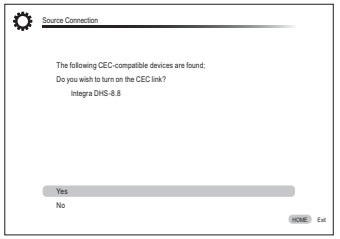
■ 2nd Step : Source Connection

You can check whether or not each input source is connected correctly.

1. **When the Source Connection start screen is displayed, select "Yes, Continue" with the cursors and press ENTER.**

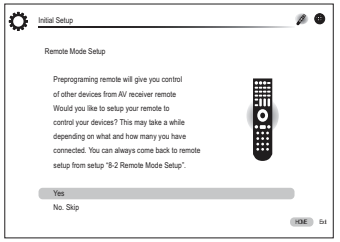


2. **Select the desired input to check the connection and press ENTER.**
   Start playback of the selected device. If connection is correct, video/audio of the input source selected on the unit will be played.
3. **After checking the connection, select "Yes" with the cursors and press ENTER.**
   - If you select "No" and press ENTER, the error cause will be displayed. Follow the guidance to remove the error cause and check the connection again.
4. **Select "Yes" with the cursors and press ENTER on the remote controller to check the connection of other inputs or select "No, Done Checking" and press ENTER to skip.**
   If you select "Yes", you will return to the screen of step 2.
   If you select "No, Done Checking", you will proceed to step 5.
5. **Enabling HDMI Linked Operation and Other Functions**
   In the next screen, you can enable the HDMI linked operation with CEC compliant device, connection with ARC compatible TV, and HDMI Through function. Select "Yes" with the cursors to enable them or "No, Done Checking" to skip, and press ENTER on the remote controller.
6. **Select "Yes" with the cursors and press ENTER to enable the CEC link function or select "No" and press ENTER to keep it disabled.**



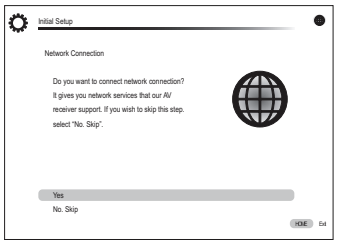
If you select "Yes", the connection with ARC compatible TV and HDMI Through function will be set to "Auto" and enabled.

■ 3rd Step : Remote Mode Setup


Initial Setup
Remote Mode Setup
Preprograming remote will give you control of other devices from AV receiver remote
Would you like to setup your remote to control your devices? This may take a while depending on what and how many you have connected. You can always come back to remote setup from setup "8-2 Remote Mode Setup".
Yes
No, Skip
HOME
Exit

In this step, you can enable operation of the other components using the remote controller of the unit. When the Remote Mode Setup start screen is displayed, select "Yes" with the cursors and press ENTER on the remote controller. Follow the guidance to select the desired REMOTE MODE button and in the keyboard screen, enter the first three characters of the brand name of the device you are going to program (e.g., "ONK" for ONKYO) and search for the remote control code. The guidance will also explain how to set the remote controller.

■ 4th Step : Network Connection



You can check the network connection and make the Wi-Fi setting. When the Network Connection start screen is displayed, select "Yes" with the cursors and press ENTER on the remote controller. If you select "Wired" in the next screen, you can view the LAN cable connection status. To make the Wi-Fi setting, select "Wireless", press ENTER on the remote controller and follow the sections below.

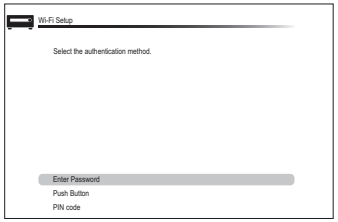
Make the following preparations.
Wi-Fi connection requires an access point such as wireless LAN router (∗). Write down the SSID and password (key) of the access point if they are shown in the label of the main body. If the access point has an automatic setting button (may be called differently according to the manufacturer), you can set up without inputting the password. For how to use the automatic setting button of the access point, refer to its instruction manual.

∗ The unit supports Wi-Fi connection with 2.4 GHz access point.

1. Select the SSID of the access point to be connected with the cursor buttons and press ENTER.
When the SSID of the access point appears on the TV screen, select the desired access point.

- If you changed the initial setting of the access point to skip password entry, Step 3 starts automatically.
- If you changed the initial setting of the access point to hide the SSID, see "When the access point is not displayed".

2. Select and set the authentication method.
The "Enter Password" screen, instead of the following screen, may be displayed automatically if the wireless LAN router does not have an automatic setting button.



When the screen above is displayed, select and set one of the three authentication methods: "Enter Password", "Push Button" and "PIN code". See below for details of and how to set each method.

Enter Password: Enter the password of the access point to establish connection.
① Select "Enter Password" with the cursor buttons and press ENTER.
② Enter the password (∗) on the keyboard screen, select "OK" with the cursor buttons and press ENTER.
∗ Select "Shift" and press ENTER to toggle between upper and lower case. Select "←" or "→" and press ENTER to move the cursor to the selected direction. Select "Back Space" and press ENTER to delete the character at the left of the cursor position. To select whether to mask the password with "∗" or display it in plain text, press D on the remote control. Press + 10 on the remote controller to enable the "Shift" function and CLR to delete all the input characters.
③ If the security method of the access point to be connected is WEP, select "Default Key ID", select "OK" and press ENTER.

Push Button: Use the automatic setting button of the access point to establish connection.
① Select "Push Button" with the cursor buttons and press ENTER.
② Hold down the automatic setting button of the access point for the necessary seconds, select "OK" with the cursor buttons and press ENTER.

PIN code: Select this method when the automatic setting button of the access point is beyond the reach. Select "PIN code" with the cursor buttons and press ENTER to display the 8-digit PIN code. Register the displayed PIN code to the access point, select "OK" with the cursor buttons and press ENTER. For how to register the PIN code to the access point, refer to its instruction manual.

3. Establish connection.
The connection process starts and the Wi-Fi indicator on the left of the unit's display starts flashing. When connection has been established, the Wi-Fi indicator changes from flashing to staying lit. If the Wi-Fi indicator does not stay lit, connection has not been established. Make the setting again. If "Push Button" does not work, try "Enter Password".

When the access point is not displayed
Select "Other..." with the ► cursor on the remote controller and press ENTER to display the keyboard screen. Input the SSID and password. Make the following settings according to the router setting.

■ WPA/WPA2 method
Select "WPA" or "WPA2" in "Security Method", select "OK" and press ENTER.

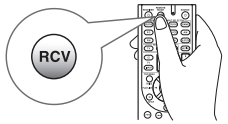
■ WEP method
Select "WEP" in "Security Method" and select "Default Key ID". Then select "OK" and press ENTER.
- If encryption setting has not been made on the wireless LAN router, select "None" in "Security Method", select "OK" and press ENTER.

■ Exiting the setup wizard

After finishing the initial setup, keep "Finished" selected and press ENTER on the remote controller. Connection and setting of the unit is now completed. See Step 3 and enjoy your home theater.

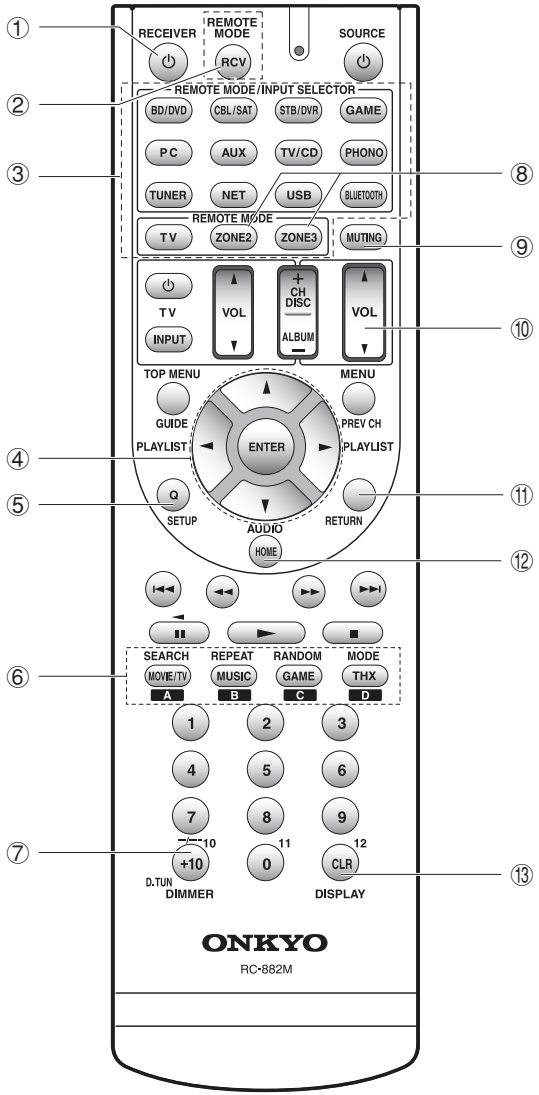
Step 3: Playing Back

1 Playing the player and TV



● **To control the unit**: The remote controller of this unit has the remote mode function for controlling other devices. You cannot control this unit when the remote controller is in the remote mode other than RECEIVER mode (for controlling this unit). Be sure to press ② RCV to select the RECEIVER mode before starting operation.

1. **Turn the power on.**
   Press ①⏻RECEIVER on the remote controller to turn the power on.
   - Switch the input on the TV to that assigned to the unit. Use the TV's remote controller.
2. **Select the input of the unit and start playback on the player or TV.**
   Press ③INPUT SELECTOR to which the desired player has been assigned. Press TV/CD to play the TV's sound. You can also use the input selector buttons on the main unit.
   - Input will automatically be selected if the TV or player is CEC compliant and connected to the unit with HDMI cable.
3. **Select the desired listening mode.**
   Press the ⑥ listening mode buttons to switch the mode so that you can enjoy different listening modes. For details about the listening modes, see "Listening modes" on the next page.
4. **Adjust the volume with ⑩.**



Remote controller parts name

① ⏻**RECEIVER button**: Turns the unit on or into standby mode.
② **RCV button**: Switches the remote controller to the mode for operating this unit.
③ **REMOTE MODE/INPUT SELECTOR button**: Switches the input to be played.
④ **Cursor buttons and ENTER button**: Moves the cursor and confirms the selection.
⑤ **Q SETUP button**: Displays the Quick Setup menu that allows you to quickly access the frequently used setting items including input selection and volume adjustment.
⑥ **Listening mode buttons**: Allows you to select the listening mode.
⑦ **DIMMER button**: Switches the brightness of the display.
⑧ **ZONE2 button and ZONE3 button**: For use when the unit is connected with a pre-main amplifier in a separate room and sound is played there.
⑨ **MUTING button**: Temporarily mutes audio.
⑩ **VOLUME buttons**: Allows you to adjust the volume. This button also cancels the muting.
⑪ **RETURN button**: Returns the display to the previous state.
⑫ **HOME button**: Displays the HOME menu that allows you to make advanced settings and use Internet radio and DLNA.
⑬ **DISPLAY button**: Switches the information on the display.

- The buttons other than those above are for operating other devices.

Listening modes

You can select a listening mode from various options such as Dolby Atmos, Dolby Digital and DTS. Select the desired mode by switching and listening actual sound in different modes. The selectable listening modes depend on the format of the input signals.

MOVIE/TV: You can select a listening mode suitable for movies and TV programs.

MUSIC: You can select a listening mode suitable for music.

GAME: You can select a listening mode suitable for games.

THX: You can select a THX listening mode.

PURE AUDIO (main unit only) (European, Australian and Asian models): The display and analog video circuits are cut off to provide purer sound.

- For details on the listening modes, see the Advanced Manual.

"Direct" for playing the input signals as-is
Selecting this mode allows the input signals to be played as they are. For example, 2 ch signals of music CD will be played in stereo, 5.1 ch signals in 5.1 ch, and Dolby Digital signals of blu-ray disc or DVD in the Dolby Digital sound field according to the specified number of channels.

Other useful functions

■ **Playing Video and Audio from Different Sources**: It is possible to play audio and video from different sources. For example, you can play audio from the CD player and video from the BD/DVD player. In this case, press BD/DVD and then TV/CD. Then start playback on the BD/DVD player and CD player. This function is effective when an input with audio only has been selected (TV/CD, TUNER or PHONO in the initial setting).

■ **Adjusting Sound Quality**: It is possible to enhance or moderate the low and high pitched ranges of front speakers. Press TONE on the main unit several times to select the desired setting from "Bass", "Treble" and "Phase Matching Bass", and adjust with +/–.

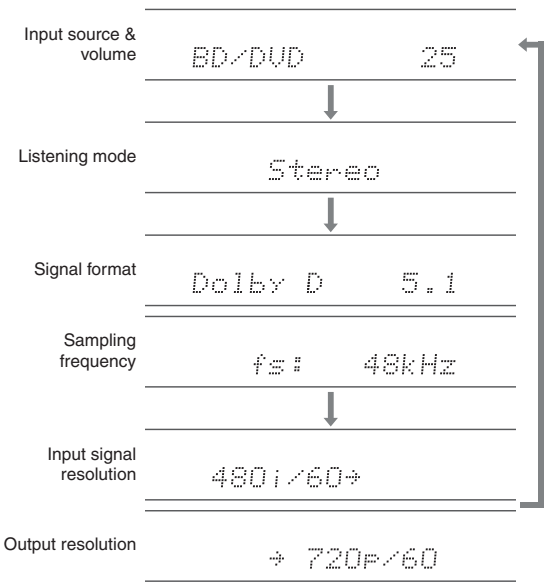
- It cannot be set if the listening mode is Pure Audio (European, Australian and Asian models), Direct or THX.

"Bass": Allows you to enhance or moderate the low pitched range.
"Treble": Allows you to enhance or moderate the high pitched range.
"Phase Matching Bass": Allows you to keep the clear midrange and effectively enhance the low pitched range.

■ **Muting Temporarily**: Press MUTING on the remote controller. To cancel the muting, press MUTING again, or press VOL ▲/▼.

■ **Changing the Display Brightness**: Press DIMMER on the remote controller. The display brightness changes each time you press the button.

■ **Checking the Input Format**: Press DISPLAY on the remote controller several times to switch the display of the main unit in order of:



- If "Dolby D 5.1" is displayed in signal format, the Dolby Digital 5.1 ch signals are being input. When listening to AM/FM radio, the band, frequency and preset number are displayed.

2 Listening to AM/FM Radio

The Basic Manual explains the method using automatic tuning. For manual tuning, see the Advanced Manual.

1. **Press TUNER on the main unit several times to select either "AM" or "FM".**
2. **Press TUNING MODE on the unit, so that the "AUTO" indicator on the display lights.**
3. **Press ▼TUNING▲ on the unit.**
   The automatic tuning to a radio station starts. Searching stops when one is tuned. When tuned into a radio station, the "►TUNED◄" indicator on the display lights. The "FM STEREO" indicator lights if the radio station is an FM radio station.

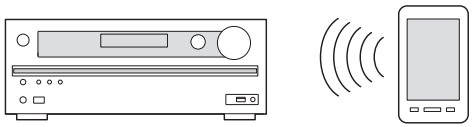
(Actual display varies depending on the country.)

Registering an AM/FM Radio Station: It allows you to register up to 40 of your favorite AM/FM radio stations.

1. Tune into the AM/FM radio station you want to register.
2. Press MEMORY on the unit.
   The preset number on the display flashes.
3. Repeatedly press ◄PRESET► on the unit to select a number between 1 and 40 while the preset number is flashing (about 8 seconds).
4. Press MEMORY on the unit again to register.
   When registered, the preset number stops flashing. To select a preset radio station, press ◄PRESET► on the main unit or CH +/– on the remote controller.

3 Connecting and playing the Bluetooth-enabled device

You can wirelessly enjoy music files stored in a smartphone or other Bluetooth-enabled device. The coverage area is 48 feet (15 meters).



- The Bluetooth-enabled device needs to support the A2DP profile.
- Note that connection is not always guaranteed with all Bluetooth-enabled devices.

Pairing

Pairing is necessary when using the Bluetooth-enabled device for the first time. Before starting the procedure, learn how to enable the Bluetooth setting function and to connect with other devices on the Bluetooth-enabled device.

1. **Press BLUETOOTH on the remote controller.**
   The unit enters the pairing mode and the BLUETOOTH indicator starts flashing.
2. **While the BLUETOOTH indicator is flashing, complete connection on the Bluetooth-enabled device in the nearby area within about 2 minutes.**
   If the name of this unit is displayed on the Bluetooth-enabled device's display, select this unit. Paring will end after a short time.
   - If a password is requested, enter "0000".
   - When connecting the unit to any other Bluetooth-enabled device, start pairing by pressing and holding BLUETOOTH until the BLUETOOTH indicator starts flashing. This unit can store the data of up to eight paired devices.

Playing sound of the Bluetooth-enabled device

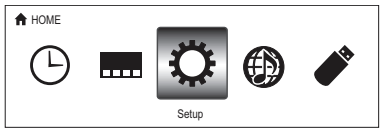
If the unit is on and the Bluetooth-enabled device is connected, the input will be automatically switched to BLUETOOTH. Play music in this state.

- It may take about a minute until connection is established when the unit is on since the Bluetooth function takes some time to start up.
- If the volume setting on the Bluetooth-enabled device is low, the sound will not be output from this unit.
- Due to the characteristics of Bluetooth wireless technology, the sound produced on this unit may slightly be behind the sound played on the Bluetooth-enabled device.

4 Using the HOME menu

In the HOME menu, you can make advanced settings and use Internet radio and DLNA. For details on the operation, see the Advanced Manual.

1. **After pressing RCV, press HOME on the remote controller.**
   The HOME menu is displayed on the TV screen. You can also use the HOME button on the main unit.



2. **Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection.**
   To return to the previous screen, press RETURN. To return to the HOME menu, press HOME.

■ **Sleep Timer**: Select to turn the unit into standby mode automatically when the specified time elapses.

■ **InstaPrevue**: Select to preview videos input from the HDMI input jacks collectively in a single screen. The screen has a main window (current input video) and sub windows (other input videos). To switch the current input, select the desired sub window with the cursor buttons and press ENTER.

- A black sub window is shown for the input with no video signals.
- "InstaPrevue" cannot be selected if the video is being input from HDMI IN 5 or 6, or there is no signal from the main window.
- Depending on video signals, the picture may not be properly rendered on the preview thumbnails.
- 1080p or higher resolution is not supported.

■ **Setup**: You can change the assignment of input terminals and input selector buttons and also make various speaker settings and other advanced settings.

■ **Network Service**: Select to use Internet radio services and the DLNA function. When you connect the unit to the network and press ENTER, the network service screen will be displayed on the TV. On the TV screen, select the desired service or music file with the cursors of the remote controller and press ENTER to confirm and start playback.

Internet radio service: You can listen to TuneIn or such other Internet radio stations registered in advance.

DLNA : You can play music files stored in the PC or NAS device connected to the network. Select the server with the cursors, select the desired music file and press ENTER to start playback.

Home Media: You can play music files in a shared folder on the PC or NAS device connected to the network. Select the server with the cursors, select the desired music file and press ENTER to start playback.

- "Network Service" becomes selectable after the network starts up even if it cannot be selected first. It may take about a minute to start up.
- When "Network Service" is selected for the first time, the "DISCLAIMER" screen will appear on the TV. Select "Agree" if you agree the content. If you do not agree the content, you cannot use the network service.
  ✳ You cannot use the Network Service function unless the TV is connected via HDMI since selecting "Agree" in the "DISCLAIMER" screen is not possible.
- Layout of the icons in the "Network Service" top menu can be changed. Press NET on the remote controller and press D. Select the source icon with the cursors and press ENTER, and then select the destination icon and press ENTER. The positions of the icons are switched each other.

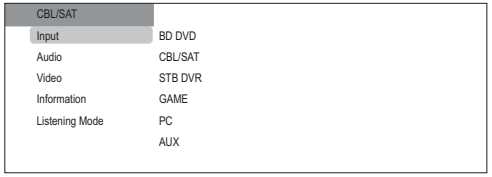
■ **USB**: Select "USB" in the TV screen and connect a USB storage device to the USB port on the front panel. On the TV screen, select the desired folder or music file with the cursors of the remote controller and press ENTER to confirm and start playback.

- "USB" becomes selectable after the USB function starts up even if it cannot be selected first. It may take about a minute to start up.

5 Using Quick Setup menu

In the Quick Setup menu, you can set frequently used functions including input selection and volume adjustment.

1. **Press Q SETUP on the remote controller.**
   The Quick Setup menu is displayed on the connected TV's screen.



2. **Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection.**
   To return to the previous screen, press RETURN.

■ **Input**: Select the input and check the assignment of input selector buttons.

■ **Audio** : You can perform various audio settings including audio quality and speaker level adjustment.

- You cannot select this item when audio is output from the TV's speakers.

A/V Sync: If the video is behind the audio, you can delay the audio to offset the gap. Different settings can be set for each input.

- It cannot be set if the input is "NET", "USB" or "BLUETOOTH".
- It cannot be set if the listening mode is Pure Audio (European, Australian and Asian models) or Direct.

Bass, Treble: Adjust volume of the front speaker.

- It cannot be set if the listening mode is Pure Audio (European, Australian and Asian models), Direct or THX.

Phase Matching Bass: Suppress phase shift in the midrange to enhance bass sound. Thus smooth and powerful bass sound can be obtained.

- It cannot be set if the listening mode is Pure Audio (European, Australian and Asian models), Direct or THX.

Subwoofer Level, Center Level: Adjust the speaker level while listening to the sound. The adjustment you made will be reset to the previous status when you turn the unit to standby mode.

- The speakers cannot be adjusted if they have been set to "No" or "None" in "Setup" - "2. Speaker Setup" - "Speaker Configuration".

AccuEQ Room Calibration: Disables the sound field correction setting set in the automatic speaker setting. The setting can be separately set to each input.

- This setting cannot be selected if the automatic speaker setting has not been performed.
- It cannot be set if headphones are connected or the listening mode is Pure Audio (European, Australian and Asian models) or Direct.

Late Night: Make small sounds to be easily heard. It is useful when you need to reduce the volume while watching a movie late night. You can enjoy the effect on Dolby Digital, Dolby Digital Plus and Dolby TrueHD sources only.

- Turning the unit to standby mode will set the setting to "Off". In case of Dolby TrueHD, the setting will be set to "Auto".
- You cannot use the function during Dolby TrueHD playback if "Setup" - "3. Audio Adjust" - "Dolby" - "Loudness Management" is set to "Off".

Music Optimizer: Improve the quality of the compressed audio. Playback sound of lossy compressed files such as MP3 will be improved. The setting can be separately set to each input.

- The setting is effective in the signals of 48 kHz or less. The setting is not effective in the bitstream signals.
- It cannot be set if the listening mode is Pure Audio (European, Australian and Asian models) or Direct.

Re-EQ, Re-EQ (THX): Adjust the soundtrack that was processed to enhance its high pitch range, in order to make it suitable for home theater.

- In Re-EQ, the following listening modes can be used: Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Multichannel, DTS, DTS-ES, DTS Neo:6 Cinema, DTS 96/24, DTS Neo:6, DTS-HD High Resolution Audio, DTS-HD Master Audio and DTS Express.
- In Re-EQ (THX), the following listening modes can be used: THX Cinema, THX Surround EX, and THX Select2 Cinema.

■ **Video**:

Monitor Out: The video input signals input to the unit will be converted by the unit when they are output from the HDMI OUT jack to the TV so that their resolution can match that of the TV used. Select the HDMI OUT jack to be used for output.

Wide Mode: You can set the aspect ratio.

Picture Mode: You can adjust the image quality. "Cinema" will automatically adjust the image to be suitable to watch movie and "Game" suitable to play game. In "Standard", the resolution will be changed but the image quality will not be adjusted. In "Custom", you can adjust the brightness, contrast, hue and saturation as desired. If you do not adjust the resolution and image quality, select "Bypass".

- "Wide Mode" and "Picture Mode" can be set only on the video output from the HDMI OUT MAIN jack.
- "Video" cannot be selected if the input is "NET", "USB" or "BLUETOOTH".

■ **Information**:

Audio: Displays the audio input source, format, number of channels, sampling frequency, listening mode, number of output channels, and other audio information.

Video: Displays the video input source, resolution, signal format, color tone, 3D information, Aspect, Picture Mode, output, and other Video information.

Tuner: Displays the band, frequency, preset number, and other tuner (radio) information.

■ **Listening Mode**: Select the listening mode from the categories of "MOVIE/TV", "MUSIC", "GAME" and "THX".

- It cannot be set when audio is played from the TV's speakers.

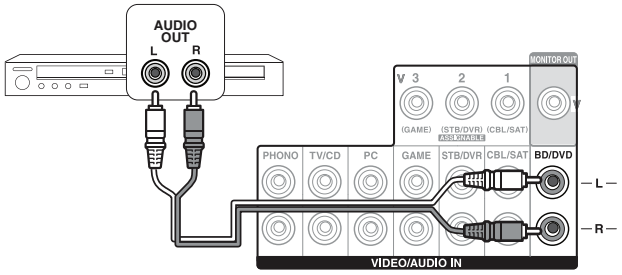
6 Using the multi-zone function

You can multi-zone connect the unit with an integrated amplifier and speakers in a separate room and play sound from an external device connected to the analog audio input jacks of the unit, sound from the "NET", "USB" or "BLUETOOTH" source, and the AM/FM broadcasting.
It is possible to perform playback in the main room and a separate room at the same time, for example by playing the Blu-ray Disc player in the main room where the unit is placed while playing Internet radio in a separate room. It is also possible to perform playback only in a separate room.

- As for analog audio input, it is possible to play the same source or different sources in the main room and separate room.
- As for the "NET", "USB" and "BLUETOOTH", you cannot select different inputs for the main room and separate room. For example, if "NET" has been selected in the main room and then "USB" is selected as playback source in the separate room, the input in the main room will change to "USB" accordingly.
- When listening to AM/FM broadcasting, you cannot select different stations for the main room and separate room. Therefore broadcasting of the same station will be heard in the both rooms.

Connecting with Player

To output audio of the Blu-ray Disc player or such other player as the source of multi-zone playback, it is necessary to connect the RCA audio output jacks of the player and the analog audio input jacks of the unit using the analog audio cable.

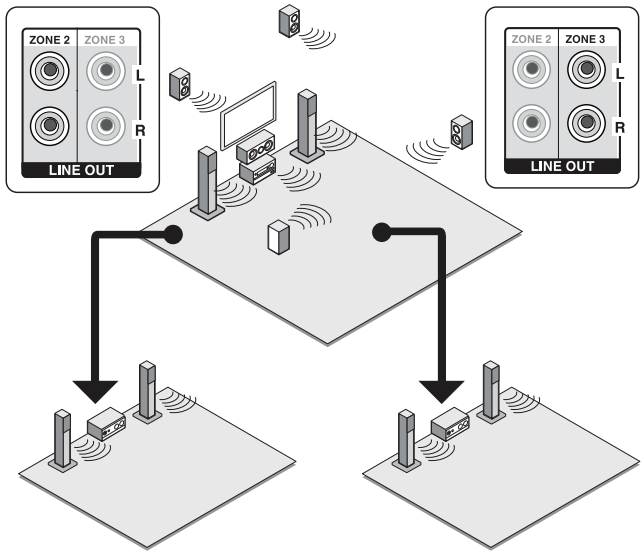


- Output to multi-zone is not possible if the connection is only with HDMI cable or digital cable.
- Analog audio output setting may be necessary on the player.

Making multi-zone connection

■ Connecting an Integrated Amplifier in a Separate Room

You can enjoy 2-channel stereo playback in the other room during playing 7.2-channel in the main room.
Connect the LINE OUT ZONE2 jacks or LINE OUT ZONE3 jacks of the unit and the line-in jacks of the pre-main amplifier in a separate room with an analog audio (RCA) cable.

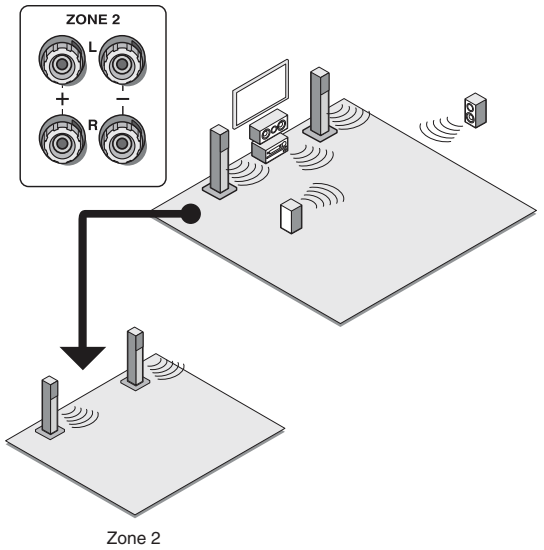


- The volume should be adjusted with the pre-main amplifier used in the separate room.

■ Connecting speakers in another room

It is possible to directly connect the speakers in another room without an amplifier. Connect the speakers in another room to the SPEAKERS ZONE2 terminals of the unit using speaker cables. Note that 5.2 ch will be the maximum in (∗) the main room during Zone 2 playback. Sound cannot be output from the Surround Back speakers and Height speakers.

∗ In this case, the Dolby Atmos listening mode cannot be selected.



Change the setting: After connecting the speakers, press RCV and then HOME on the remote controller, select "Setup" - "2. Speaker Setup" - "Speaker Settings" and set "Powered Zone2" to "Yes".

- Adjust the volume on this unit. To adjust the volume, press ZONE2 on the remote controller and adjust with VOL▲/▼. To control on the main unit, press ZONE2 and within 8 seconds, adjust with the MASTER VOLUME control. You can mute the sound by pressing MUTING on the remote controller.

Performing multi-zone playback

1. **Press ZONE2 or ZONE3 on the remote controller, point the remote controller at the unit and press ⏻RECEIVER.**
   "Z2" or "Z3" lights on the main unit display and the multi-zone function is enabled. (ZONE 2 or ZONE 3 is now on.)
2. **Press ZONE2 or ZONE3 on the remote controller again and press INPUT SELECTOR of the input to be played in a separate room.**
   - If you turn the unit to standby during multi-zone playback, the Z2/Z3 indicators are dimmed and the playback mode is switched to playback in a separate room only. Performing steps 1 and 2 while the unit is in standby also switches the playback mode to playback in a separate room only. To play the same source in the main room and separate room, hold down ZONE2 or ZONE3 for approximately 3 seconds.

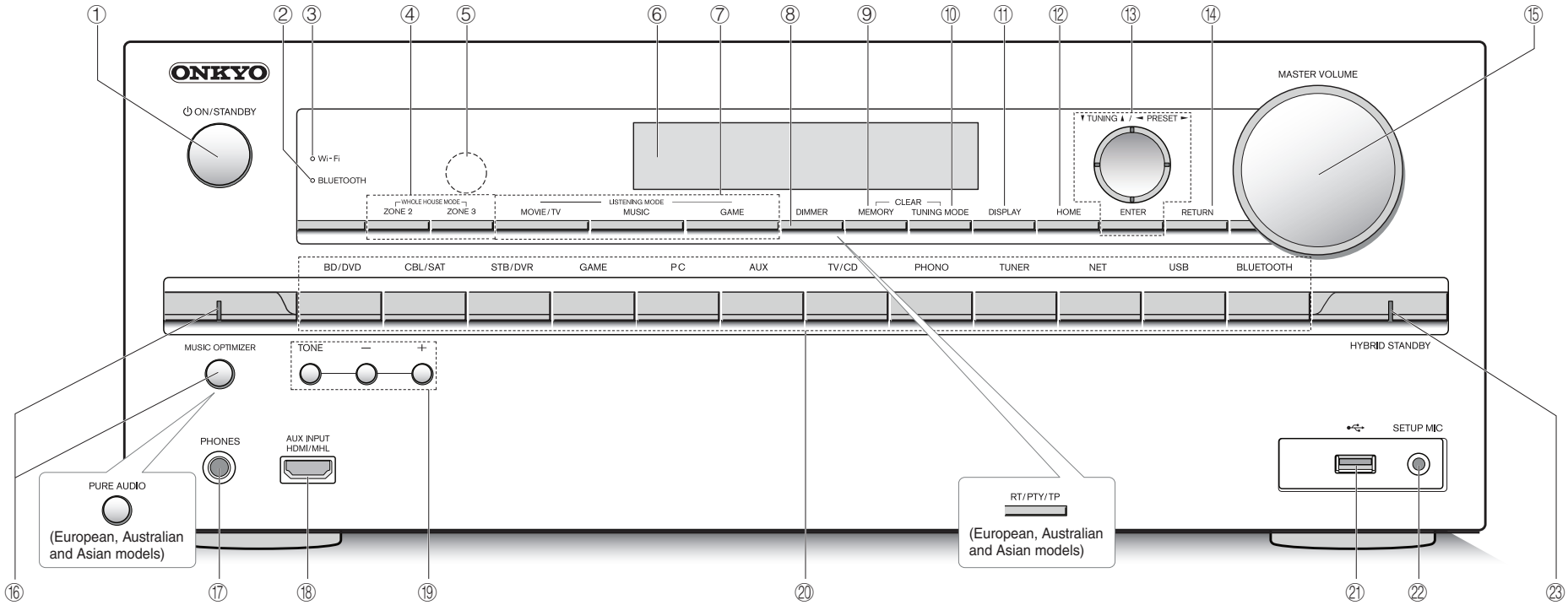
To control on the main unit: Press ZONE2 or ZONE3 and within 8 seconds, press the input selector button of the input to be played in a separate room. To play the same source in the main room and separate room, press ZONE2 or ZONE3 twice.

To turn off the multi-zone function: Press ZONE2 or ZONE3 on the remote controller and press ⏻RECEIVER. To control on the main unit, press ZONE2 or ZONE3 and within 8 seconds, press ⏻ON/STANDBY.

- If Zone 2 or Zone 3 is on, power consumption during standby becomes larger than normal.
- If Zone 2 or Zone 3 is turned on when the listening mode of the main room is Pure Audio, it will automatically switch to Direct. (European, Australian and Asian models)
- While Zone 2 or Zone 3 is on, the RI linked system function (interlink between Onkyo components) is disabled.
- Pressing INPUT SELECTOR on the remote controller while you are using the remote controller for Zone 2 or Zone 3 will switch the controlled target to the main room. To control Zone 2 or Zone 3 again, press ZONE2 or ZONE3 to enter the Zone control mode.

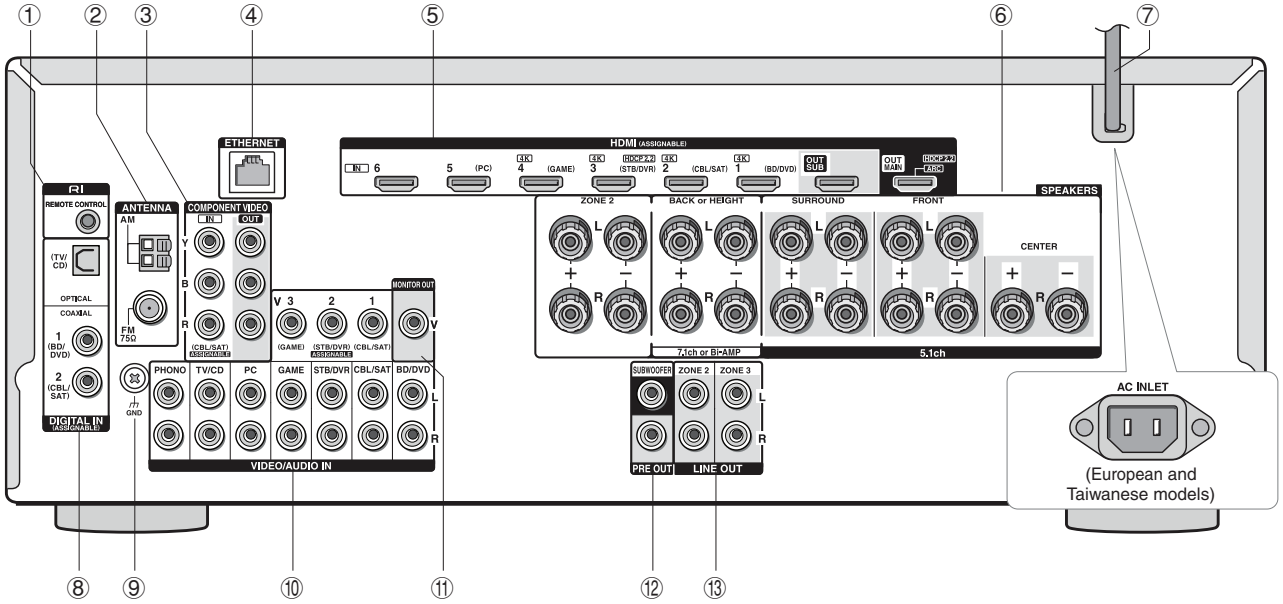
WHOLE HOUSE MODE: If you press ZONE2 and ZONE3 Simultaneously while playback is being performed in the main room, the WHOLE HOUSE MODE is turned on, "Z2" and "Z3" on the display light at the same time and the playback sources of all the rooms are switched to the same source at once.

- WHOLE HOUSE MODE is effective only for playback of the external player connected to the analog audio input jacks.
- This function cannot be used if headphones are connected or audio is output from the speakers of the TV.



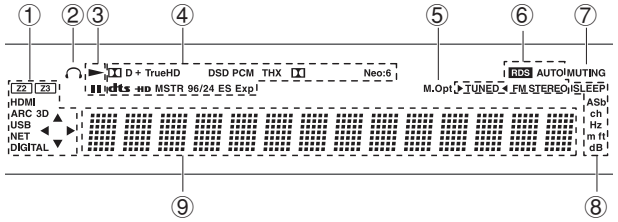
Front Panel

① **⏻ON/STANDBY button**: Turns the unit on or into standby mode.
② **BLUETOOTH indicator**: Flashes while pairing with a Bluetooth-enabled device is in progress and stays lit when pairing is completed.
③ **Wi-Fi indicator**: Lights when the unit is connected to the wireless LAN router.
④ **ZONE 2 button and ZONE 3 button**: Controls the multi-zone function.
⑤ **Remote control sensor**: Receives signals from the remote controller.
⑥ **Display**
⑦ **LISTENING MODE buttons**: Allows you to select the listening mode.
⑧ **DIMMER button (North American and Taiwanese models)**: Switches the brightness of the display.
RT/PTY/TP button (European, Australian and Asian models): Can be used when receiving the station transmitting text information.
⑨ **MEMORY button**: Registers or deletes a station.
⑩ **TUNING MODE button**: Switches the tuning mode.
⑪ **DISPLAY button**: Switches the information on the display.
⑫ **HOME button**: Displays the HOME menu.
⑬ **Cursor buttons, ▼TUNING▲ button, ◄PRESET► button and ENTER button**: Moves the cursor and confirms the selection. When listening to AM/FM broadcasting, tune in to the station with ▼TUNING▲ or select the registered station with ◄PRESET►.
⑭ **RETURN button**: Returns the display to the previous state.
⑮ **MASTER VOLUME**: Allows you to adjust the volume.
⑯ **MUSIC OPTIMIZER button and indicator (North American and Taiwanese models)**: Turns on/off the MUSIC OPTIMIZER function that improves the quality of the compressed audio.
PURE AUDIO button and indicator (European, Australian and Asian models): Switches to the Pure Audio listening mode. The indicator lights when Pure Audio listening mode is set.
⑰ **PHONES jack**: Stereo headphones with a standard plug are connected.
⑱ **AUX INPUT HDMI/MHL jacks**: An HD video camera or MHL-enabled mobile device is connected. It is possible to send video and audio of an MHL-enabled mobile device.
⑲ **TONE and Tone Level buttons**: Adjusts the high tone and low tone.
⑳ **Input selector buttons**: Switches the input to be played.
㉑ **USB port**: A USB storage device is connected so that music files stored in it can be played.
㉒ **SETUP MIC jack**: The supplied speaker setup microphone is connected.
㉓ **HYBRID STANDBY indicator**: Lights if the unit enters standby mode when the HDMI Through, network standby or Wakeup via Bluetooth function is enabled.



Rear Panel

① **RI REMOTE CONTROL jack**: An Onkyo product with RI jack can be connected and synchronized with this unit.
② **ANTENNA AM/FM (75 Ω) terminal**: The supplied antennas are connected.
③ **COMPONENT VIDEO IN/OUT jacks**: Component video input/output jacks
④ **ETHERNET port**: Used for LAN connection
⑤ **HDMI IN/OUT jacks**: Digital video signals and audio signals are transmitted between the unit and the connected devices.
⑥ **SPEAKERS terminals**: Speakers are connected. To use the multi-zone function, connect the speakers in the separate room to the ZONE2 speaker terminals.
⑦ **Power cord (North American, Australian and Asian models)**
AC INLET (European and Taiwanese models): The power cord is connected.
⑧ **DIGITAL IN COAXIAL/OPTICAL jacks**: Digital audio signals are input.
⑨ **GND terminal**: The ground wire of the turntable is connected.
⑩ **COMPOSITE VIDEO/AUDIO IN jacks**: Analog video signals and audio signals are input.
⑪ **MONITOR OUT V jack**: Video signals are output to the connected monitor or TV via a composite video cable.
⑫ **PRE OUT SUBWOOFER jacks**: A subwoofer with built-in amplifier is connected.
⑬ **LINE OUT ZONE 2/ZONE 3 jacks**: Audio output jacks connected to the integrated amplifier for multi-zone playback in a separate room.



Display

① Lights in the following conditions.
"Z2" "Z3" (∗1): ZONE 2 or ZONE 3 output is on. / "HDMI": HDMI signals are input and HDMI input selector is selected. / "ARC": Audio signals are input from ARC compatible TV and TV/CD input selector is selected. / "3D": Input signals are 3D. / "USB" (∗2): "USB" input is selected and USB storage device is connected. / "NET" (∗2): "NET" input is selected and the unit is connected to the network. / "DIGITAL": Digital signals are input and the digital input selector is selected. / Cursor indicators: NET or USB is controlled.
∗1 Both "Z2" and "Z3" light when the WHOLE HOUSE MODE function is on.
∗2 "USB" and "NET" will flash if the connection is not correct.
② Lights when headphones are connected.
③ Lights when NET or USB is controlled.
④ Lights according to the type of input digital signals and the listening mode.
⑤ Lights when Music Optimizer is enabled.
⑥ Lights in the following conditions. "AUTO": Tuning mode is auto. / "►TUNED◄": Receiving AM/FM radio. ►◄ flashes while tuning is automatically performed. / "FM STEREO": Receiving FM stereo. / "RDS" (European, Australian and Asian models): Receiving RDS broadcasting.
⑦ "MUTING": Flashes when muting is on.
⑧ Lights in the following conditions. "SLEEP": Sleep timer has been set. / "ASb": Auto Standby is on. / "ch": Channel is being set. / "Hz": Crossover frequencies are being set. / "m/ft": Speaker distances are being set. / "dB": Speaker volume is being set.
⑨ Displays various information of the input signals. Pressing DISPLAY displays the type of input digital signals and the listening mode.

Troubleshooting

Before starting the procedure
Problems may be solved by simply turning the power on/off or disconnecting/connecting the power cord, which is easier than working on the connection, setting and operating procedure. Try the simple measures on both the unit and the connected device. If the problem is that the video or audio is not output or the HDMI linked operation does not work, disconnecting/connecting the HDMI cable may solve it. When reconnecting, be careful not to wind the HDMI cable since if wound the HDMI cable may not fit well. After reconnecting, turn off and on the unit and the connected device.

The AV receiver turns off unexpectedly.
- The AV receiver will automatically enter standby mode when Auto Standby is set and launched.

There's no sound, or it's very quiet.
- A wrong input selector button has been selected. Select a correct input for the player. Also check that muting is not on.
- Not all listening modes use all speakers.

There's no picture.
- A wrong input selector button has been selected.
- Video is not displayed if the listening mode is Pure Audio. (European, Australian and Asian models)
- To display video from the connected player on the TV screen while the unit is in standby, you need to enable HDMI Through function.
- When the TV image is blurry or unclear, power cord or connection cables of the unit may have interfered. In that case, keep distance between TV antenna cable and cables of the unit.
- If you connect a player supporting HDCP2.2, be sure to connect it to the HDMI IN3 jack of the unit. At the time, connect the TV to the HDMI OUT MAIN jack.

HDMI control does not function correctly.
- Set the CEC link function of the unit to on. It is also necessary to make the HDMI linked system setting on the TV. See the TV's instruction manual for details.

The remote controller does not work.
- Be sure to press RCV first before operating the unit with the remote controller.

There is no sound for multi-zone function.
- With multi-zone function, sound is output only when the signal input source is an external component connected to the analog audio input jacks of the unit, "NET", "USB", "BLUETOOTH", "AM" or "FM". Multi-zone playback is not possible if the player and the unit are connected via HDMI cable or digital cable. Connect the RCA audio output jacks of the player and the analog audio input jacks of the unit with analog audio cable. Also analog audio output setting may be necessary on the player.

Cannot access to network.
- Try plugging/unplugging the unit or the wireless LAN router or check their power-on status. This will work well in many cases.
- If the desired wireless LAN router is not in the access point list, it may be set to hide SSID or the ANY connection may be off. Change the setting and try again.

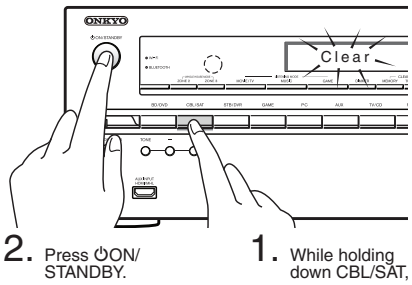
Cannot connect Bluetooth.
- Try plugging/unplugging the unit and the Bluetooth-enabled player. After that, check that the Bluetooth function is enabled on the Bluetooth-enabled device and the connection with the unit has been established.

■ Resetting the unit

Resetting the unit to the status at the time of shipment may solve the problem. If the measures above do not solve the problem, reset the unit with the following procedure. If you reset the unit status, your preferences will be reset to the defaults. Note them down before starting reset.

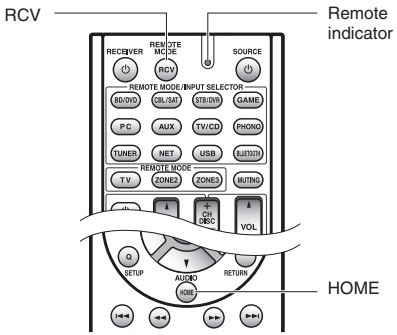
● **How to reset**:

1. **While holding down CBL/SAT on the main unit (note that step 2 must be performed with this button pressed down).**
2. **Press ⏻ON/STANDBY on the main unit ("Clear" appears on the display and the unit returns to standby).**



● **How to reset the remote controller**:

1. **While holding down RCV on the remote controller, press HOME until the remote indicator lights (about 3 seconds).**
2. **Within 30 seconds, press RCV again.**



Specifications

Amplifier Section

Rated Output Power
All channels:
110 watts minimum continuous power per channel, 8 ohm loads, 2 channels driven from 20 Hz to 20 kHz, with a maximum total harmonic distortion of 0.08% (FTC)
125 watts minimum continuous power per channel, 6 ohm loads, 2 channels driven at 1 kHz, with a maximum total harmonic distortion of 0.7% (FTC)
(North American)
7 ch × 170 W at 6 ohms, 1 kHz, 1 ch driven of 1% (IEC) (Others)
Maximum Effective Output Power
7 ch × 185 W at 6 ohms, 1 kHz, 1 ch driven (JEITA) (Asian)
Dynamic Power (∗)
∗ IEC60268-Short-term maximum output power
250 W (3 Ω, Front)
220 W (4 Ω, Front)
130 W (8 Ω, Front)
THD+N (Total Harmonic Distortion+Noise)
0.08% (20 Hz - 20 kHz, half power)
Damping Factor
60 (Front, 1 kHz, 8 Ω)
Input Sensitivity and Impedance (Unbalance)
200 mV/47 kΩ (LINE)
2.5 mV/47 kΩ (PHONO MM)
Rated RCA Output Level and Impedance
200 mV/2.2 kΩ (LINE OUT)
Maximum RCA Output Level and Impedance
2 V/2.2 kΩ (LINE OUT)
Phono Overload
70 mV (MM 1 kHz 0.5% Direct)
Frequency Response
5 Hz - 100 kHz/+1 dB, –3 dB (Direct mode)
Tone Control Characteristics
±10 dB, 20 Hz (BASS)
±10 dB, 20 kHz (TREBLE)
Signal to Noise Ratio
106 dB (LINE, IHF-A)
80 dB (PHONO MM, IHF-A)
Speaker Impedance
4 Ω - 16 Ω

Video Section

Input Sensitivity/Output Level and Impedance
1 Vp-p/75 Ω (Component Y)
0.7 Vp-p/75 Ω (Component P_B/C_B, P_R/C_R)
1 Vp-p/75 Ω (Composite)
Component Video Frequency Response
5 Hz - 100 MHz/+0 dB, –3 dB

Tuner Section

FM Tuning Frequency Range
87.5 MHz - 107.9 MHz (North American and Taiwanese)
87.5 MHz - 108.0 MHz, RDS (Others)
AM Tuning Frequency Range
522/530 kHz - 1611/1710 kHz
Preset Channel
40

Network Section

Ethernet LAN
10BASE-T/100BASE-TX
Wireless LAN
IEEE 802.11 b/g/n standard
(Wi-Fi® standard)
2.4 GHz band:
1 - 11 ch (North American)
10 - 11 ch (Spain)
10 - 13 ch (France)
1 - 13 ch (Others)
(Wi-Fi® standard)

Bluetooth Section

Communication system
Bluetooth Specification version 2.1 + EDR (Enhanced Data Rate)
Maximum communication range
Line of sight approx. 15 m (∗)
Frequency band
2.4 GHz band (2.4000 GHz - 2.4835 GHz)
Modulation method
FHSS (Freq Hopping Spread Spectrum)
Compatible Bluetooth profiles
A2DP 1.2 (Advanced Audio Distribution Profile)
AVRCP 1.3 (Audio Video Remote Control Profile)
Supported Codecs
SBC
Transmission range (A2DP)
20 Hz - 20,000 Hz (Sampling frequency 44.1 kHz)
∗ The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, cordless phone, reception sensitivity, antenna's performance, operating system, software application, etc.

General

Power Supply
AC 120 V, 60 Hz (North American and Taiwanese)
AC 220 - 240 V, 50/60 Hz (Others)
Power Consumption
6.9 A (North American and Taiwanese)
690 W (Others)
0.1 W (Stand-by, North American and Taiwanese)
0.2 W (Stand-by, Others)
85 W (No-sound)
Dimensions (W × H × D)
435 mm × 175 mm × 379 mm
17-1/8" × 6-7/8" × 14-15/16"
Weight
11.5 kg (25.4 lbs.)

● HDMI

Input
IN1 (BD/DVD, 4K), IN2 (CBL/SAT, 4K), IN3 (STB/DVR, 4K, HDCP2.2), IN4 (GAME, 4K), IN5 (PC), IN6, AUX INPUT (HDMI/MHL) (Front)
Output
OUT MAIN (ARC, HDCP2.2), OUT SUB
Video Resolution
Pass through: 4K 60 Hz (YCbCr 4:2:0)
Upscaling: 4K 30 Hz
Audio Format
DTS-HD Master Audio, DTS-HD High Resolution Audio, Dolby Atmos, Dolby TrueHD, Dolby Digital Plus, DSD, Multichannel PCM
Supported
3D, Audio Return Channel, DeepColor, x.v.Color, LipSync, CEC (RIHD), 4K (Upscaling and Passthrough)

● Video Inputs

Component
IN (CBL/SAT)
Composite
IN1 (CBL/SAT), IN2 (STB/DVR), IN3 (GAME)

● Video Outputs

Component
OUT
Composite
MONITOR OUT

● Audio Inputs

Digital
OPTICAL (TV/CD)
COAXIAL 1 (BD/DVD), 2 (CBL/SAT)
Analog
BD/DVD, CBL/SAT, STB/DVR, GAME, PC, TV/CD, PHONO

● Audio Outputs

Analog
ZONE2 LINE OUT, ZONE3 LINE OUT
2 SUBWOOFER PRE OUT
Speaker Outputs
FRONT L/R, CENTER, SURROUND L/R, BACK or HEIGHT L/R, ZONE2 L/R
Phones
PHONES (Front, ø 6.3)

● Others

Setup Mic	1 (Front)
RI	1
USB	1 (Front)
Ethernet	1

Specifications and features are subject to change without notice.

Others

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Taiwan Pat. I238671 European Pat. 1,360,874

THX Select2 Plus
Before any home theater component can be THX Select2 Plus certified, it must pass a rigorous series of quality and performance tests. Only then can a product feature the THX Select2 Plus logo, which is your guarantee that the Home Theater products you purchase will give you superb performance for many years to come. THX Select2 Plus requirements define hundreds of parameters, including power amplifier performance, and pre-amplifier performance and operation for both digital and analog domains. THX Select2 Plus receivers also feature proprietary THX technologies (e.g., THX Mode) which accurately translate movie soundtracks for home theater playback.

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Precautions

For European Models

Declaration of Conformity

We declare, under our sole responsibility, that this product complies with the standards:

- Safety
- Limits and methods of measurement of radio disturbance characteristics
- Limits for harmonic current emissions
- Limitation of voltage changes, voltage fluctuations and flicker
- RoHS Directive, 2011/65/EU
- Hereby, Onkyo Corporation, declares that this TX-NR737 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
- С настоящето, Onkyo Corporation, декларира, че TX-NR737 е в съответствие със съществените изисквания и другитеприложими разпоредби на Директива 1999/5/ЕС.
- Onkyo Corporation tímto prohlašuje, že TX-NR737 splňuje základní požadavky a všechna příslušná ustanoveni Směrnice 1999/5/ES.
- Undertegnede Onkyo Corporation erklærer herved, at følgende udstyr TX-NR737 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
- Hiermit erklärt Onkyo Corporation, dass sich das Gerät TX-NR737 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
- Käesolevaga kinnitab Onkyo Corporation seadme TX-NR737 vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
- ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Ο ΚΑΤΑΣΚΕΥΑΣΤΗΣ Onkyo Corporation ΔΗΛΩΝΕΙ ΟΤΙ TX-NR737 ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ
- Por la presente, Onkyo Corporation, declara que este TX-NR737 cumple con los requisitos esenciales y otras exigencias relevantes de la Directiva 1999/5/EC.
- Par la présente, Onkyo Corporation déclare que l'appareil TX-NR737 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
- Con la presente Onkyo Corporation dichiara che questo TX-NR737 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
- Ar šo Onkyo Corporation deklarē, ka TX-NR737 atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
- Šiuo Onkyo Corporation deklaruoja, kad šis TX-NR737 atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
- A Onkyo Corporation ezzennel kijelenti, hogy a TX-NR737 típusú berendezés teljesíti az alapvető követelményeket és más 1999/5/EK irányelvben meghatározott vonatkozó rendelkezéseket.
- Hierbij verklaart Onkyo Corporation dat het toestel l TX-NR737 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
- Niniejszym Onkyo Corporation deklaruje że TX-NR737 jest zgodny z zasadniczymi wymaganiami i innymi właściwymi postanowieniami Dyrektywy 1999/5/EC.
- Eu, Onkyo Corporation, declaro que o TX-NR737 cumpre os requisitos essenciais e outras provisões relevantes da Directiva 1999/5/EC.
- Prin prezenta, Onkyo Corporation, declară că aparatul TX-NR737 este în conformitate cu cerințele esențiale şi cu alte prevederi pertinente ale Directivei 1999/5/CE.
- Onkyo Corporation týmto vyhlasuje, že TX-NR737 a spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
- Onkyo Corporation izjavlja, da je ta TX-NR737 v skladu z bistvenimi zahtevami in drugimi relevantnimi določili direktive 1999/5/ES.
- Onkyo Corporation vakuuttaa täten että TX-NR737 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
- Härmed förklarar Onkyo Corporation att denna TX-NR737 följer de väsentliga kraven och andra relevanta stadgar i Direktiv 1999/5/EC.
- Hér með lýsir Onkyo Corporation því yfir að varan TX-NR737 er í samræmi við grunnkröfur og aðrar kröfur sem gerðar eru í tilskipun 1999/5/EC.
- Onkyo Corporation erklærer herved at denne TX-NR737 er i overensstemmelse med vesentlige krav og andre relevante bestemmelser i direktiv 1999/5/EC.
- Ovime Onkyo Corporation, potvrđuje da je TX-NR737 u suglasnosti sa osnovnim zahtjevima i ostalim relevantnim odredbama Direktive 1999/5/EC.

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http://www.intl.onkyo.com/support/

The above-mentioned information is subject to change without prior notice.
Visit the Onkyo web site for the latest update.

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ONKYO

TX-NR737

AV RECEIVER

Advanced Manual

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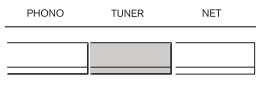
AM/FM Radio Receiving Function

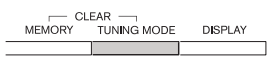
Tuning into a Radio Station

■ Tuning into stations automatically

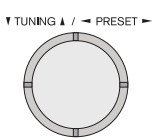
1. Press TUNER on the main unit several times to select either "AM" or "FM".



2. Press TUNING MODE so that the "AUTO" indicator on the display lights.



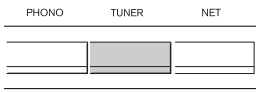
3. Press ▼TUNING▲ to start Auto tuning.
   - Searching automatically stops when a station is found. When tuned into a radio station, the "►TUNED◄" indicator on the display lights. If FM stereo broadcasting is tuned, the "FM STEREO" indicator lights.
   - No sound is output while the "►TUNED◄" indicator is off.



When the signal from an FM radio station is weak: Radio wave may be weak depending on the building structure and environmental conditions. In that case, manually tune into the radio station of your choice by referring to the next section.

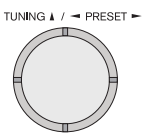
■ Tuning into stations manually

1. Press TUNER on the main unit several times to select either "AM" or "FM".



2. Press TUNING MODE so that the "AUTO" indicator on the display goes off.

3. Press ▼TUNING▲ to select the desired radio station.
   - The frequency changes by 1 step each time you press the button. The frequency changes continuously if the button is held down and stops when the button is released. Tune by looking at the display.

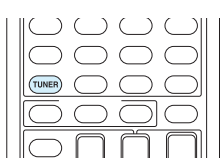


To return the display to "AUTO": Press TUNING MODE on the main unit again. A station is automatically tuned. Normally "AUTO" should be displayed.

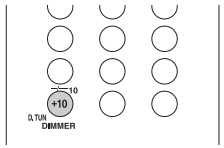
■ Tuning into stations by frequency

It allows you to directly enter the frequency of the radio station you want to listen to.

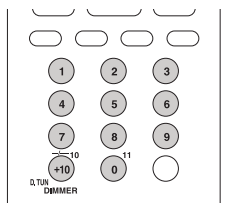
1. Press TUNER on the remote controller several times to select either "AM" or "FM".



2. Press D.TUN.



3. Using the number buttons, enter the frequency of the radio station within 8 seconds.
   - To enter 87.5 (FM), for example, press 8, 7, 5, or 8, 7, 5, 0. If you entered a wrong number, press D.TUN and enter a correct one.

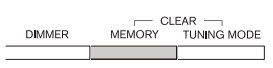


Registering an AM/FM Radio Station

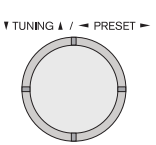
It allows you to register up to 40 of your favorite AM/FM radio stations. Registering radio stations in advance allows you to tune into your radio station of choice directly.

■ Registering a Station

1. Tune into the AM/FM radio station you want to register.
2. Press MEMORY on the unit so that the preset number on the display flashes.



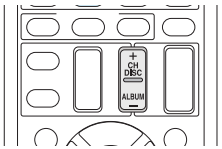
3. Repeatedly press ◄PRESET► to select a number between 1 and 40 while the preset number is flashing (about 8 seconds).



4. Press MEMORY again to register the station.
   - When registering, the preset number stops flashing.
   - Repeat this procedure for all of your favorite AM/FM radio stations.

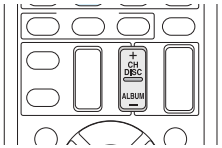
■ Selecting a Preset Radio Station

1. Press CH +/- on the remote controller to select a preset number.
   - Alternatively you can press ◄PRESET► on the main unit. You can also select by directly entering the preset number with the number buttons on the remote controller.

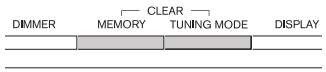


■ Deleting a Preset Radio Station

1. Press CH +/- on the remote controller to select the preset number to delete.



2. Press and hold MEMORY on the main unit and press TUNING MODE to delete the preset number.
   - When deleting, the number on the display goes off.



Using RDS (European, Australian and Asian models)

RDS stands for Radio Data System and is a method of transmitting data in FM radio signals.

- RDS works only in areas where RDS broadcasts are available.
- In some cases, the text information appeared on the display is not identical to the content transmitted by the RDS station. Furthermore, unexpected characters may be displayed when the unit receives unsupported characters. However, this is not a malfunction.
- If the signal from an RDS station is weak, the RDS data may be displayed continuously or not at all.

PS (Program Service): Tuning into a radio station distributing Program Service information displays the radio station name. Pressing DISPLAY displays the frequency for 3 seconds.

RT (Radio Text): Tuning into a radio station transmitting Radio Text information displays text on the display of the unit.

PTY (Program Type): Allows you to search for RDS stations by program type.

TP (Traffic Program): Allows you to search for radio stations transmitting traffic information.

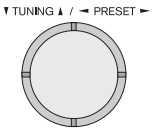
■ Displaying Radio Text (RT)

1. Press RT/PTY/TP on the main unit once.
   - The Radio Text (RT) is displayed scrolling across the display. "No Text Data" is displayed when no text information is available.

■ Searching by Type (PTY)

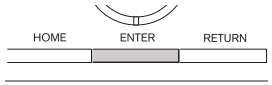
1. Press RT/PTY/TP on the main unit twice. The current program type appears on the display.

2. Press ◄PRESET► to select the type of program to search for.



- The following RDS station types are displayed:
  None
  News (News reports)
  Affairs (Current affairs)
  Info (Information)
  Sport
  Educate (Education)
  Drama
  Culture
  Science (Science and technology)
  Varied
  Pop M (Pop music)
  Rock M (Rock music)
  Easy M (Middle of the road music)
  Light M (Light classics)
  Classics (Serious classics)
  Other M (Other music)
  Weather
  Finance
  Children (Children's programmes)
  Social (Social affairs)
  Religion
  Phone In
  Travel
  Leisure
  Jazz (Jazz music)
  Country (Country music)
  Nation M (National music)
  Oldies (Oldies music)
  Folk M (Folk music)
  Document (Documentary)

3. Press ENTER to search the radio stations of the selected type.

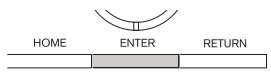


4. When such a radio station is found, the indication on the display flashes. Then, press ENTER again.
   - If no stations are found, the message "Not Found" is displayed.

■ Listening to Traffic Information (TP)

1. Press RT/PTY/TP on the main unit thrice.
   - When the traffic information is transmitted from the radio station you selected, "[TP]" is displayed. "TP" only is displayed if no traffic information is available.

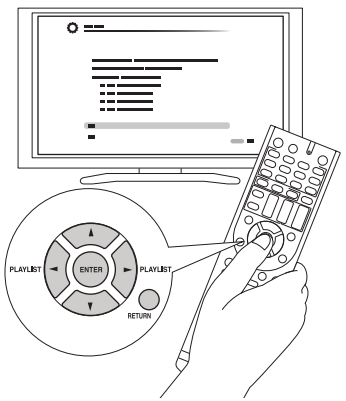
2. Press ENTER to search a radio station distributing traffic information.



3. When such a radio station is found, searching stops and playing traffic information starts.
   - "Not Found" is displayed if no radio station distributing traffic information is found.

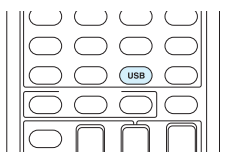
Playing Content from a USB Storage Device

● **Operation**: You can set up by viewing the guidance displayed on the TV screen. To display the guidance, you need to make HDMI connection between the unit and TV. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN.

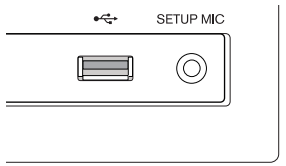


■ Playing Back

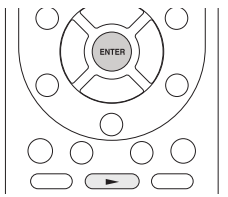
1. Press USB on the remote controller to select "USB".



2. Plug your USB storage device with the music files into the USB port of the unit so that "USB" lights on the display.
   - If the "USB" indicator flashes, check whether the USB storage device is plugged in properly.
   - Do not unplug the USB storage device while "Connecting..." is appeared on the display. This may cause data corruption or malfunction.



3. Press ENTER.
   - The list of folders and music files on the USB storage device is displayed on the screen, select the folder with the cursors and press ENTER to confirm your selection.
4. With the cursors, select the music file to play, and then press ENTER or ► to start playback.



Listening to Internet Radio

About Internet Radio

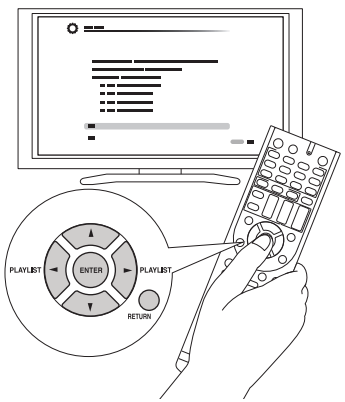
Internet radio, also called net radio, web radio or streaming radio, is an audio service accessible at the websites of service providers who distribute music and audio programs in digital format. There are numerous websites all over the world, from terrestrial station, special station to personal website that provide such a service.
The unit comes preset with Internet radio stations (*) such as TuneIn for you to enjoy these services, just by connecting the unit to the Internet.

* Network services or contents may become unavailable if the service provider terminates its service.

TuneIn

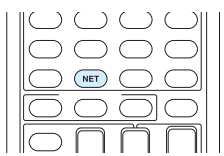
With more than 70,000 radio stations and 2 million on-demand programs registered, TuneIn is a service where you can enjoy music, sports and news from all over the world.

● **Operation**: You can set up by viewing the guidance displayed on the TV screen. To display the guidance, you need to make HDMI connection between the unit and TV. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN.



■ Playing Back

1. Press NET on the remote controller to display NET TOP screen.
   - "NET" lights on the display.
   - Alternatively you can press Home and select "Network Service" in the HOME menu.



2. With the cursors, select "TuneIn", and then press ENTER to display TuneIn top screen.
3. With the cursors, select a radio station or program and press ENTER to start playing.

■ Regarding the TuneIn Menu

To display the TuneIn menu, press MENU or ENTER while playing a radio station. Selecting the corresponding menu item with the cursors and pressing ENTER allows you to perform the following operations:

Add to My Presets: Registers radio stations and programs in your "My Presets" within TuneIn. This allows you to play registered radio stations and programs with a simple operation. ("My Presets" is not displayed if it is empty.)

Remove from My Presets: Deletes a radio station or program from your "My Presets" within TuneIn.

Report a problem: Reports a problem or interactively solves a problem related to TuneIn.

View Schedule: Displays the radio station or program schedule.

Clear recents: Clears all radio stations and programs from the "Recents" within TuneIn. (This menu is displayed only when a radio station or program inside the "Recents" is being played.)

Add to My Favorites: Registers radio stations and programs in "My Favorites" of "Network Service". This allows you to play registered radio stations and programs with a simple operation.

■ Regarding the TuneIn Account

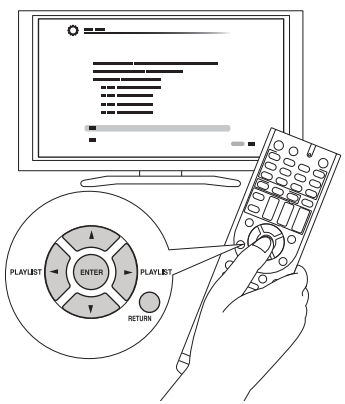
Creating an account on the TuneIn website (tunein.com) and logging in it from the unit allows you to automatically add radio stations and programs to your "My Presets" on the unit as you save them on the website .
To display a radio station registered in "My Presets", you must log into TuneIn from the unit. To log in, select "Login" - "I have a TuneIn account" in the "TuneIn" top list on the unit, and then enter your user name and password.

- If you associate the device on My Page within the TuneIn website using the registration code obtained by selecting "Login" - "Login with a registration code" on the unit, you can log in without entering the user name and password.

Pandora®–Getting Started (U.S., Australia and New Zealand only)

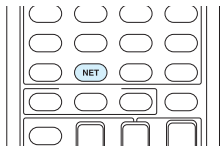
Pandora is a free, personalized Internet radio service that plays the music you know and helps you discover music you'll love.

● **Operation**: You can set up by viewing the guidance displayed on the TV screen. To display the guidance, you need to make HDMI connection between the unit and TV. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN.



■ Playing Back

1. Press NET on the remote controller to display NET TOP screen.
   - The "NET" indicator on the display stays lit. To display the NET TOP screen, you can alternatively press HOME, select "Network Service" on the displayed HOME menu, and then press ENTER.



2. With the cursors on the remote controller, select "Pandora", and then press ENTER.
3. Use ▲/▼ to select "I have a Pandora Account" or "I'm new to Pandora" and then press ENTER.
   If you are new to Pandora select "I'm new to Pandora". You will see an activation code on your TV screen. Please write down this code. Go to an Internet connected computer and point your browser to www.pandora.com/onkyo. Enter your activation code and then follow the instructions to create your Pandora account and your personalized Pandora stations. You can create your stations by entering your favorite tracks and artists when prompted. After you have created your account and stations you can return to your Onkyo receiver and press ENTER to begin listening to your personalized Pandora.
   If you have an existing Pandora account, you can add your Pandora account to your Onkyo receiver by selecting "I have a Pandora Account" and logging in with your email and password.
   - If you want to use multiple user accounts, see "Using Multiple Accounts". Login can be made from the "Users" screen.
4. To play a station, use ▲/▼ to select the station from your station list, and then press ENTER. Playback starts and the playback screen appears.

■ Create a New Station

Enter the name of a track, artist, or genre and Pandora will create a unique radio station for you based on the musical qualities of that track, artist, or genre.

I like this track: Give a track "thumbs-up" and Pandora will play more music like it.

I don't like this track: Give a track "thumbs-down" and Pandora will ban that track from the current station.

Why is this track playing?: Discover some of the musical attributes that Pandora uses to create your personal radio stations.

I'm tired of this track: If you are tired of a track, you can put the track to sleep and Pandora will not play it for one month.

Create station from this artist: Creates a radio station from this artist.

Create station from this track: Creates a radio station from this track.

Delete this station: This will permanently delete a station from your Pandora account. All of your thumbs feedback will be lost should you choose to re-create the station with the same track or artist.

Rename this station: Lets you rename the current radio station.

Bookmark this artist: Pandora will bookmark your favorite artist for your profile on www.pandora.com.

Bookmark this track: Pandora will bookmark the current track and allow you to buy them all from Amazon or iTunes in one step!

Add to My Favorites: Adds a station to My Favorites list.

PANDORA®

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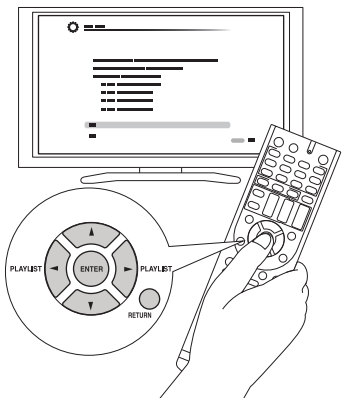
SiriusXM Internet Radio (North American only)

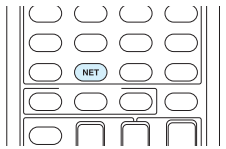
If you want to listen to the service, you must subscribe. To subscribe go to www.siriusxm.com/internetradio with your computer. When you subscribe, you will be provided with a username and password which has to be entered into the AV receiver. To use SiriusXM Internet Radio, you must have your AV receiver connected to the Internet. Using the remote control, follow these steps:

● **Operation**: You can set up by viewing the guidance displayed on the TV screen. To display the guidance, you need to make HDMI connection between the unit and TV. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN.



■ Playing Back

1. Press NET on the remote controller to display NET TOP screen.
   - The "NET" indicator on the display stays lit. To display the NET TOP screen, you can alternatively press HOME, select "Network Service" on the displayed HOME menu, and then press ENTER.



2. With the cursors on the remote controller, select "SiriusXM Internet Radio", and then press ENTER.
3. Select "Sign In", and then press ENTER. If you have an existing SIRIUS account, you can sign in by selecting "Sign In". Enter your user name and password in the next keyboard screen, or in Web Setup. If you don't know your username or password, call Sirius XM at (888) 539-7474 for assistance.
   - If you want to use multiple user accounts, see "Using Multiple Accounts". Login can be made from the "Users" screen.

   Using the keyboard screen

   ① Use ▲/▼/◄/► and ENTER to enter your user name and password.
   ② Select "OK".
   ③ Press ENTER. The "Confirm your entries" screen appears.
   ④ Press ENTER. "Please wait..." appears and then "SiriusXM Internet Radio" screen appears which displays the category available for selection.
4. Use ▲/▼ to select the category and then press ENTER. The channel list screen for the selected category appears.
5. Use ▲/▼ to select the desired channel and then press ENTER.
   The playback screen for the selected channel appears and you can listen to SiriusXM Internet Radio. You can control the tracks with the buttons on the remote control. Enabled buttons: ►, ■, I◄◄, ►►I

Add to My Favorites: Adds a channel to My Favorites list.

Add to Presets: Adds the currently playing station to presets list.

Delete from Presets: Deletes the currently playing station from presets list.

SiriusXM INTERNET RADIO

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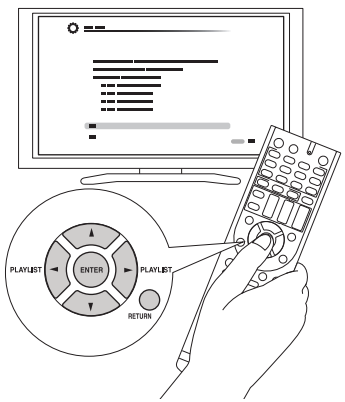
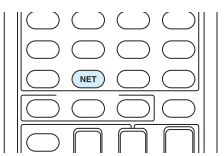
Slacker Personal Radio (North American only)

● **Operation**: You can set up by viewing the guidance displayed on the TV screen. To display the guidance, you need to make HDMI connection between the unit and TV. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN.



■ Playing Back

1. Press NET on the remote controller to display NET TOP screen.
   - The "NET" indicator on the display stays lit. To display the NET TOP screen, you can alternatively press HOME, select "Network Service" on the displayed HOME menu, and then press ENTER.



2. With the cursors on the remote controller, select "Slacker Personal Radio", and then press ENTER.
3. If you do not have an account, create one on the Slacker website (www.slacker.com) with your computer. If you already have a Slacker account, select "Sign in to your account" and then press ENTER. The keyboard screen appears. You can enter information from the remote control or the keys on the main unit.
4. If there are no mistakes in the information you have entered, use ▲/▼/◄/► to select "OK" then press ENTER. An account information confirmation screen appears.
5. If you do not have an account, select "Access without Sign In" and press ENTER to use a restricted version of the service. Note that use will be restricted.
   - If you want to use multiple user accounts, see "Using Multiple Accounts". Login can be made from the "Users" screen.
6. Use ▲/▼ to select a menu item and then press ENTER. To sign out, use ▲/▼ to select "Sign out" from this screen and then press ENTER.
7. Use ▲/▼ to select a station and then press ENTER or ► to start playback from the station. The playback screen appears.
8. You can control the tracks with the buttons on the remote control.
   Enabled buttons: ►, ❚❚, ■, ►►|

   Rate Song as Favorite: Stores information to server, making it more likely that the song will be played again.

   Ban Song: Stores information to server, making it less likely that the song will be played again.

   Ban Artist: Stores information to server, making it less likely that the songs from this artist will be played again.

   Mark Favorite: Adds the currently playing station to your favorites.

   Unmark Favorite: Deletes the currently playing station from your favorites.

   Add song to Library: Adds the currently playing track to your library.

   Delete song from Library: Deletes the currently playing track from your library.

   Add to My Favorites: Adds a station or song to My Favorites list.

Using Multiple Accounts: The AV receiver supports multiple user accounts, which means you can freely switch between several logins. After registering user accounts, login is performed from the "Users" screen.
Press MENU while the Users screen is displayed. "Add new user", "Remove this user" menu appear. You can either store a new user account, or delete an existing one.

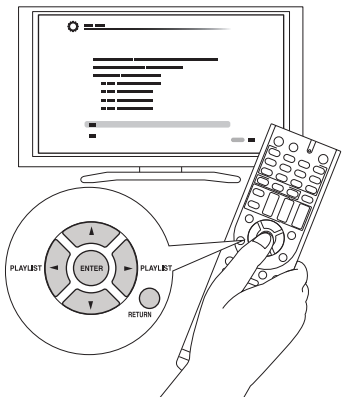
- Some of the services don't allow the use of multiple user accounts.
- You can store up to 10 user accounts.
- To switch between accounts you must first log out from the current account, and log in again on the "Users" screen.

Registering Other Internet Radios

To listen to other Internet radio program, register the program in the "My Favorites" list on the NET TOP screen as described below. The unit supports Internet radio stations stored in the following formats: PLS (URL ending in .pls), M3U (URL ending in .m3u) and RSS (URL ending in rss/rdf/xml).

- You can register up to 40 Internet radio stations.
- Depending on the data type and file format for playback, you may not be able to play an Internet radio station even when its format is PLS, M3U or Podcast (RSS).
- Available services may vary depending on your area of residence.

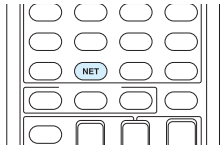
● **Operation**: You can set up by viewing the guidance displayed on the TV screen. To display the guidance, you need to make HDMI connection between the unit and TV. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN.



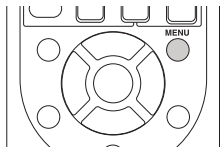
■ Registering a Station

Before operation: The name and URL of the additional radio station will be needed for this procedure. Check the specifications before use.

1. Press NET on the remote controller to display NET TOP screen.
   - "NET" lights on the display.



2. With the cursors, select "My Favorites", and then press ENTER to display the "My Favorites" list screen.
3. With the cursors, select a blank area of "My Favorites" and press MENU to display the menu screen.

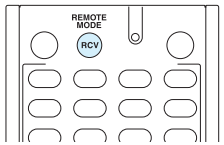


4. With the cursors, select "Create new station", and then press ENTER to display a keyboard screen.
5. Enter the name and URL of the radio station to add.
   - Select "Shift" and press ENTER to toggle between upper and lower case. Select "←" or "→" and press ENTER to move the cursor to the selected direction. Select "Back Space" and press ENTER to remove a character on the left of the cursor.

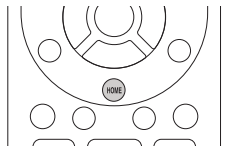
■ Registering a Station with PC

Before operation: The name and URL of the additional radio station will be needed for this procedure. Check the specifications before use.

1. Press RCV on the remote controller.
   - Always press RCV first to change the remote controller to RECEIVER mode (the mode to operate this unit) since its mode may be changed to operate another component.



2. Press HOME to display the HOME menu.



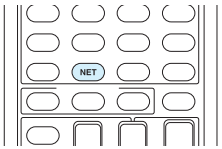
3. With the cursors, select "Setup", and then press ENTER.
4. With the cursors, select "7. Hardware Setup" - "4. Network" - "IP Address" to display the IP address.
   - Write down the IP address since you will need it later.
5. Open the Internet browser on your PC or smartphone and enter the IP address of the unit in the URL field.
   - If you are using Internet Explorer, you can also enter the URL by selecting "Open..." on the "File" menu.
   - Information of the unit is displayed on the browser. ("WEB Setup")
6. Click "My Favorites" tab, then enter the name and URL of the Internet radio station.
7. Click "Save" to register the entered Internet radio station in "My Favorites".

To rename the registered radio station: While the radio station is being played or when it is selected from the "My Favorites" list, press MENU to display the menu screen. Select "Rename this station" with the cursors and press ENTER to display the keyboard screen. Rename the station as desired.

- Radio stations can be renamed also from "WEB Setup".

■ Playing a Registered Radio Station

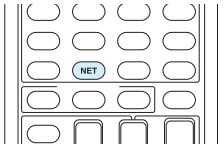
1. Press NET on the remote controller to display NET TOP screen.
   - "NET" lights on the display.



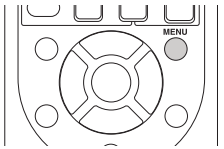
2. With the cursors, select "My Favorites", and then press ENTER to display the registered Internet radio stations.
3. With the cursors, select a radio station and press ENTER to start playing.

■ Deleting a Registered Radio Station

1. Press NET on the remote controller to display NET TOP screen.
   - "NET" lights on the display.



2. With the cursors, select "My Favorites", and then press ENTER to display the registered Internet radio stations.
3. With the cursors, select the radio station to delete and press MENU to display the menu screen.

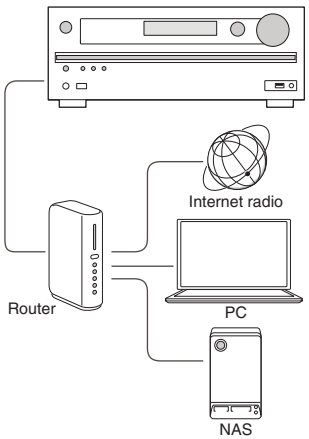


4. With the cursors, select "Delete from My Favorites", and then press ENTER.
5. With the cursors, select "OK", and then press ENTER to delete the radio station.
   - Select "Back" if you return to the previous screen.
   - Radio stations can be deleted also from "WEB Setup".

DLNA Music Streaming

About DLNA

Digital Living Network Alliance (DLNA) can be referred to as a technology standard or the industry group to develop the technology standard to interconnect and use AV components, computers and other devices in a home network. This unit allows you to use DLNA to play music files stored on a computer or a hard disk connected to your home network (NAS device). Make sure this unit and a computer or NAS device are connected to the same router.



- To stream a music file, you need a NAS device with DLNA server functions or a PC where a player (e.g., Windows Media Player 11 or Windows Media Player 12) with DLNA server functions is installed. To enable streaming with Windows Media® Player 11 or Windows Media® Player 12, you must first configure the settings.

Configuring the Windows Media® Player

■ Windows Media® Player 11

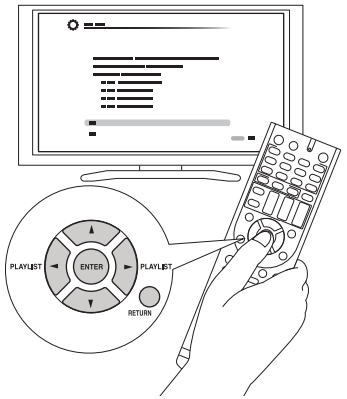
1. Turn on your PC and start Windows Media® Player 11.
2. In the "Library" menu, select "Media Sharing" to open a dialog box.
3. Select the "Share my media" check box, and then click "OK" to display a list of supported devices.
4. Select this unit, and then click "Allow".
   - The corresponding icon is checked.
5. Click "OK" to close the dialog.

■ Windows Media® Player 12

1. Turn on your PC and start Windows Media® Player 12.
2. Click "Turn on media streaming" to display a list of players in the network.
   - If media streaming is already turned on, select "More streaming options..." in the "Stream" menu to list players in the network. Proceed to step 4.
3. Click "Turn on media streaming". A list of players in the network is displayed.
4. Select this unit in "Media streaming options" and check that it is set to "Allow".
5. Click "OK" to close the dialog.

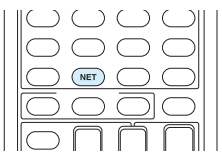
DLNA Playback

● **Operation**: You can set up by viewing the guidance displayed on the TV screen. To display the guidance, you need to make HDMI connection between the unit and TV. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN.



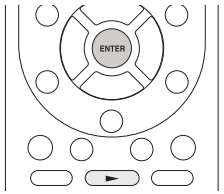
■ Playing Back

1. Start the server (Windows Media® Player 11, Windows Media® Player 12, or NAS device) storing the music files to play.
2. Press NET on the remote controller to display NET TOP screen.
   - "NET" lights on the display. If the "NET" indicator flashes, the unit is not properly connected to the network. When using a wired LAN connection, check the Ethernet cable connection, and when using a wireless LAN connection, check whether the "Wi-Fi" indicator on the left side of the unit stays lit.



3. Select "DLNA" with the cursors and press ENTER.
4. With the cursors, select the target server, and then press ENTER. A list of items on the selected server is displayed.
   - Searching does not work in servers that do not support search functions.
   - The unit cannot access pictures and videos stored on servers.
   - Contents stored on the server may not be displayed depending on the server sharing settings.

5. With the cursors, select the music file to play, and then press ENTER or ► to start playback.
   - If "No Item" is displayed, check whether the network is properly connected.



Controlling Remote Playback from a PC

You can use this unit to play music files stored on your PC by operating the PC inside your home network. The unit supports remote playback with Windows Media® Player 12. To use the remote playback function with Windows Media® Player 12, Windows Media® Player 12 must be configured in advance.

- Using a DLNA-compatible controller (such as an Android application), you can select a music file stored on Windows Media® Player 12 and stream to this unit by operating the controller. For information on how to remotely play using the controller, refer to the controller's instruction manual.

■ Setting PC

1. Turn on your PC and start Windows Media® Player 12.
2. In the "Stream" menu, select "Turn on media streaming" to open a dialog box.
   - If media streaming is already turned on, select "More streaming options..." in the "Stream" menu to list players in the network. Proceed to step 4.
3. Click "Turn on media streaming" to display a list of players in the network.
4. Select this unit in "Media streaming options" and check that it is set to "Allow".
5. Click "OK" to close the dialog box.
6. Open the "Stream" menu and check that "Allow remote control of my Player..." is checked.

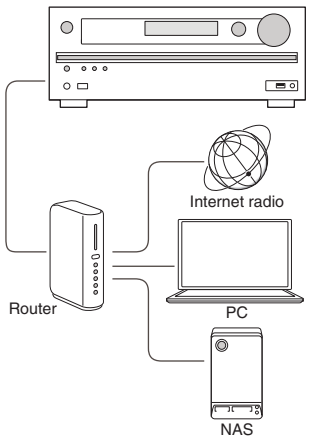
■ Remote playback

1. Turn on the power of the unit.
2. Turn on your PC and start Windows Media® Player 12.
3. Select the music file to play with Windows Media® Player 12 and right-click.
   - To remotely play a music file on another server, open the target server from "Other Libraries" and select the music file to play.
4. Select this unit in "Play to" and open the "Play to" window of Windows Media® Player 12 to start to playback music file on the unit.
   - Operations during remote playback are possible from the "Play to" window on the PC. The playback screen is displayed on the TV connected to the HDMI output of the unit. If your PC is running on Windows® 8, click "Play to", and then select this unit.
5. Adjust the volume using the volume bar on the "Play to" window.
   - Some times, the volume displayed on the remote playback window may differ from that appeared on the display of the unit.
   - When the volume is adjusted from the unit, the value is not reflected in the "Play to" window.
   - This unit cannot play music files remotely in the following conditions.
     – It is using a network service.
     – It is playing a music file on a USB storage device.
     – "Agree" was not selected in the DISCLAIMER screen that was displayed when the NET input was selected on the unit for the first time.

Music Streaming from a Shared Folder

About Shared Folder

A shared folder is configured in a network device such as a PC or NAS (hard disk connected to your home network) for access from other users.
You can play music files in a shared folder on your PC or NAS connected to the same home network as that of the unit. To play music files in a shared folder, you must first configure Windows® 8 or Windows® 7, Make sure the unit and PC or NAS device are connected to the same router.



- The sharing options must be configured and a shared folder created on the PC in advance.
- For information on how to configure the NAS device and create a shared folder, refer to the NAS device's instruction manual.

Setting PC

■ Configuring the Sharing Options

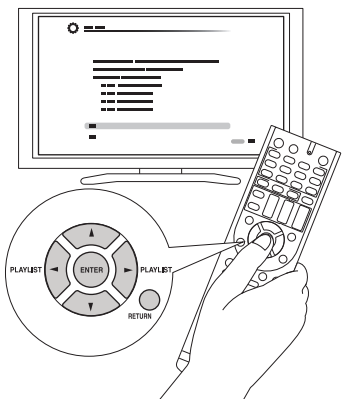
1. Select "Choose Home group and Sharing Options" on the "Control Panel".
   - If the menu is not displayed, check whether "View by" is set to "Category".
2. Select "Change advanced sharing settings".
3. Check whether the following radio buttons are selected in "Home or Work":
   "Enable network discovery"
   "Turn on file and printer sharing"
   "Turn on sharing so anyone with network access can read and write files in the Public folders"
   "Turn off password protected sharing"
4. Select "Save Changes" and click "OK" on the dialog box.

■ Creating a Shared Folder

1. Select the folder to share and right-click.
2. Select "Properties".
3. Select "Advanced Sharing" on the "Sharing" tab.
4. Select the "Share this folder" check box and click "OK".
5. Select "Share" for "Network File and Folder Sharing".
6. Select "Everyone" from the pull-down menu. Click "Add", and then "Share".
   - To set user name and password to a shared folder, set "Permissions" in "Advanced Sharing" on the "Sharing" tab.
   - Check whether a workgroup is set.

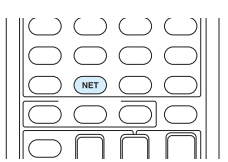
Playing from a Shared Folder

● **Operation**: You can set up by viewing the guidance displayed on the TV screen. To display the guidance, you need to make HDMI connection between the unit and TV. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN.

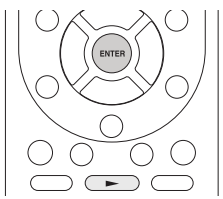


■ Playing Back

1. Press NET on the remote controller to display NET TOP screen.
   - "NET" lights on the display. If the "NET" indicator flashes, the unit is not properly connected to the network. When using a wired LAN connection, check the Ethernet cable connection, and when using a wireless LAN connection, check whether the "Wi-Fi" indicator on the left side of the unit is lit.



2. With the cursors, select "Home Media", and then press ENTER.
3. With the cursors, select the target server, and then press ENTER.
   - You can check the server name of your PC from the PC properties.
4. With the cursors, select the target shared folder, and then press ENTER.
5. If a username and password is required, enter the necessary login information.
   - The login information is the account information set at the time of creating the shared folder.
   - Once entered, the login information will be remembered from the next time onward.
6. With the cursors, select the music file to play, and then press ENTER or ► to start playback.



Using Remote Controller for Playing Music Files

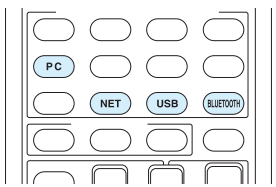
About the Remote Controller

The remote controller of this unit allows you to play music files stored on USB storage devices, Internet radio, PCs and NAS devices on your home network, as well as on Bluetooth-enabled devices. It also allows you to view information of the music file being played and perform various other operations.

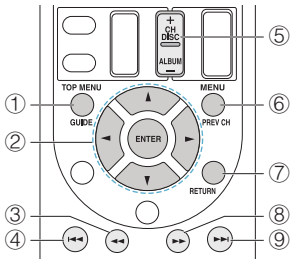
- Available buttons may vary depending on the service and device to play.
- Some buttons cannot be used with Bluetooth-enabled devices. Furthermore, the Bluetooth-enabled devices must support the AVRCP profile. Some devices may not be operated, even when they support AVRCP profile.

Remote Controller Buttons

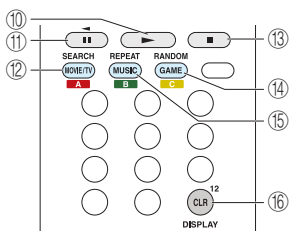
1. Press INPUT SELECTOR (PC, NET, USB or BLUETOOTH) appropriate for the input source on the remote controller.



2. Operate the remote controller by referring to the name and function of each of the buttons below.



① **TOP MENU**: This button displays the top menu for each media or server.
② **▲/▼, ENTER**: These buttons navigate through items and activate the selected item.
◄/►: These buttons cycle through pages.
③ **◄◄**: This button fast-reverses the current track. This button is not operable from 10 seconds before the playback ends.
④ **I◄◄**: This button plays the current track from the beginning. Pressing this button twice plays the previous track.
⑤ **+/-**: Moves the cursor on the Internet radio stations list in "My Favorites".
⑥ **MENU**: This button displays the menu of each Internet radio service.
⑦ **RETURN**: This button returns to the previous screen.
⑧ **►►**: This button fast-forwards the current track. This button is not operable from 10 seconds before the playback ends.
⑨ **►►I**: This button plays the next track.



⑩ **►**: This button starts the playback.
⑪ **❚❚**: This button pauses the playback.
⑫ **SEARCH**: This button toggles between the playback screen and list screen during playback.
⑬ **■**: This button stops the playback.
⑭ **RANDOM**: This button performs random playback.
⑮ **REPEAT**: This button replays the track(or tracks). Pressing this button repeatedly cycles through the repeat modes.
⑯ **DISPLAY**: This button changes the displayed track information during playback. Pressing this button when the list screen is displayed toggles the screen to playback.
- Bluetooth-enabled devices: Usable buttons are ►, I◄◄, ◄◄, ❚❚, ►►, ►►I, and ■.

Icons Displayed during Playback

Icons are displayed on the display during music file playback. The meaning of each icon is as follows:

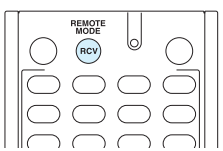
: Folder
: Track
: Play
: Pause
: Fast-forward
: Fast-reverse
: Artist
: Album
: Repeat One Track
: Repeat within a folder
: Repeat
: Shuffle

Using the Listening Modes

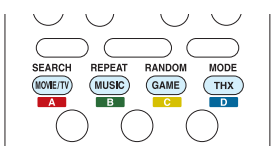
Selecting Listening Mode

The listening modes allow you to select the best sound effect for your input source.

1. Press RCV on the remote controller.
   - Always press RCV first to change the remote controller to RECEIVER mode (the mode to operate this unit) since its mode may be changed to operate another component.



2. Press one of the following buttons depending on your choice from among the four listening modes.
   - Pressing a button changes the listening mode to that chosen. Set the listening mode of your choice by listening to the actual sound.



For details on the types and difference of listening modes, see "Contents of Listening Modes".

■ MOVIE/TV button

You can select a mode suitable for movies and TV programs.

- Selectable listening modes:
  All Ch Stereo
  Direct
  Dolby Atmos
  Dolby D (Dolby Digital)
  Dolby D+ (Dolby Digital Plus)
  Dolby Surround
  Dolby TrueHD
  DSD
  DTS
  DTS 96/24
  DTS Express
  DTS-HD HR (DTS-HD High Resolution Audio)
  DTS-HD MSTR (DTS-HD Master Audio)
  DTS Neo:6 Cinema + THX Cinema
  DTS Neo:6 + THX Cinema
  ES Discrete (DTS-ES Discrete)
  ES Matrix (DTS-ES Matrix)
  Full Mono
  Mono
  Multichannel
  Neo:6
  Neo:6 Cinema
  T-D (Theater-Dimensional)
  THX Cinema
  THX S2 Cinema (THX Select2 Cinema)
  THX Surr EX (THX Surround EX)
  TV Logic

■ MUSIC button

You can select a mode suitable for music.

- Selectable listening modes:
  All Ch Stereo
  Direct
  Dolby Atmos
  Dolby D (Dolby Digital)
  Dolby D+ (Dolby Digital Plus)
  Dolby Surround
  Dolby TrueHD
  DSD
  DTS
  DTS 96/24
  DTS Express
  DTS-HD HR (DTS-HD High Resolution Audio)
  DTS-HD MSTR (DTS-HD Master Audio)
  DTS Neo:6 Music + THX Music
  DTS Neo:6 + THX Music
  ES Discrete (DTS-ES Discrete)
  ES Matrix (DTS-ES Matrix)
  Full Mono
  Multichannel
  Neo:6
  Neo:6 Music
  Orchestra
  Pure Audio
  Stereo
  Studio-Mix
  THX Music
  THX S2 Music (THX Select2 Music)
  Unplugged

■ GAME button

You can select a mode suitable for games.

- Selectable listening modes:
  All Ch Stereo
  Direct
  Dolby Atmos
  Dolby D (Dolby Digital)
  Dolby D+ (Dolby Digital Plus)
  Dolby Surround
  Dolby TrueHD
  DSD
  DTS
  DTS 96/24
  DTS Express
  DTS-HD HR (DTS-HD High Resolution Audio)
  DTS-HD MSTR (DTS-HD Master Audio)
  DTS Neo:6 + THX Games
  ES Discrete (DTS-ES Discrete)
  ES Matrix (DTS-ES Matrix)
  Full Mono
  Neo:6
  Game-Action
  Game-Rock
  Game-RPG
  Game-Sports

Multichannel
T-D (Theater-Dimensional)
THX Games
THX S2 Games (THX Select2 Games)

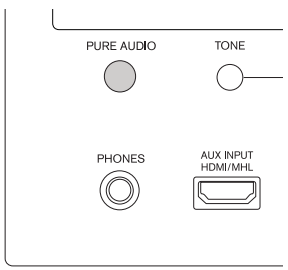
■ THX button

You can select a THX listening mode.

- Selectable listening modes:
  DTS Neo:6 Cinema + THX Cinema
  DTS Neo:6 Music + THX Music
  DTS Neo:6 + THX Cinema
  DTS Neo:6 + THX Music
  DTS Neo:6 + THX Games
  THX Cinema
  THX Music
  THX Games
  THX S2 Cinema (THX Select2 Cinema)
  THX S2 Games (THX Select2 Games)
  THX S2 Music (THX Select2 Music)
  THX Surr EX (THX Surround EX)

■ PURE AUDIO button (on the main unit only) (European, Australian and Asian models)

The display and analog video circuit is cut off to switch the unit to Pure Audio mode (European, Australian and Asian models) and provide purer sound. Selecting this mode lights the Pure Audio indicator on the unit. Pressing the button again reselects the previous listening mode.



- Selecting Pure Audio for listening mode turns off the display and analog video circuitry, but the video signals input through HDMI input are output from HDMI output.

Contents of Listening Modes

Selectable listening modes will differ depending on the number of input source channels and the actual speaker configuration. Listening modes available when headphones are connected are: Pure Audio (European, Australian and Asian models), Mono, Direct, and Stereo.

Lists in alphabetic order (A-Z)

■ All Ch Stereo

Ideal for background music, this mode fills the entire listening area with stereo sound from the front, surround, and surround back speakers.

- Input source: MONO, STEREO, 5.1 ch, 7.1 ch

■ Direct

In this mode, audio from the input source is output as-is. For example, if a 2 ch source from a music CD is input, the output will be stereo, or if Dolby Digital signal is input, the sound field will be controlled in accordance with the number of channels present.

- Input source: MONO, STEREO, 5.1 ch, 7.1 ch

■ Dolby Atmos

Introduced first in the cinema, Dolby Atmos brings a revolutionary sense of dimension and immersion to the Home Theater experience. Dolby Atmos is an adaptable and scalable object based format that reproduces audio as independent sounds (or objects) that can be accurately positioned and move dynamically throughout the 3 dimensional listening space during playback. A key ingredient of Dolby Atmos is the introduction of a height plane of sound above the listener.

- Surround back speakers or height speakers need to be installed.
- This listening mode can be selected only if the input signal is Dolby Atmos.

■ Dolby D

This mode is for use with Dolby Digital sources. The audio from the input source is output as-is, without surround sound processing.

- Input source: 5.1 ch
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.

■ Dolby D+

This mode is for use with Dolby Digital Plus sources. The audio from the input source is output as-is, without surround sound processing.

- Input source: 5.1 ch, 7.1 ch
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.
- When playing back 3.1 ch or 5.1 ch sources from Blu-ray Discs, Dolby Digital is automatically applied.

■ Dolby Surround

Dolby surround is a next generation surround technology that intelligently up mixes stereo; 5.1 and 7.1 content for playback through your surround speaker system. Dolby surround is compatible with traditional speaker layouts, as well as Dolby Atmos enabled playback systems that employ in-ceiling speakers or products with Dolby speaker technology.

- Input source: STEREO, 5.1 ch, 7.1 ch

■ Dolby TrueHD

This mode is for use with Dolby TrueHD sources. The audio from the input source is output as-is, without surround sound processing.

- Input source: 7.1 ch
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.

■ DSD

This mode is for use with DSD sources. The audio from the input source is output as-is, without surround sound processing.

- Input source: 5.1 ch
- This unit supports DSD signals input through HDMI IN. However, depending on the connected player, better sound is possible when output from the PCM output of the player. In that case, configure the player for PCM output.

- This listening mode can be selected only if your Blu-ray Disc/DVD player's output setting is DSD.

■ DTS

This mode is for use with DTS sources. The audio from the input source is output as-is, without surround sound processing.
- Input source: 5.1 ch
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.

■ DTS 96/24

This mode is for use with DTS 96/24 sources. The audio from the input source is output as-is, without surround sound processing. With 96 kHz sampling rate and 24-bit resolution, it provides superior fidelity.
- Input source: 5.1 ch
- Depending on the settings, this listening mode becomes DTS.
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.

■ DTS Express

This mode is for use with DTS Express sources. The audio from the input source is output as-is, without surround sound processing.
- Input source: 5.1 ch
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.

■ DTS-HD HR

This mode is for use with DTS-HD High Resolution Audio sources. The audio from the input source is output as-is, without surround sound processing.
- Input source: 5.1 ch, 7.1 ch
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.

■ DTS-HD MSTR

This mode is for use with DTS-HD Master Audio sources. The audio from the input source is output as-is, without surround sound processing.
- Input source: 5.1 ch, 7.1 ch
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.

■ DTS Neo:6

This mode expands any 2 ch source for 5.1 ch multichannel surround playback. It offers full-bandwidth on all channels, with great independence between the channels. There are two variants for this mode: one ideal for movies and another ideal for music.

– **Neo:6 Cinema**: Use this mode with any 2 ch movie.
  - Input source: STEREO

– **Neo:6 Music**: Use this mode with any 2 ch music source.
  - Input source: STEREO

– **Neo:6**: Use this mode to expand any 5.1 ch music source for 6.1 ch or 7.1 ch playback using Neo:6.
  - Input source: 5.1 ch
  - Surround back speakers need to be installed.

■ ES Discrete

This mode is for use with DTS-ES Discrete sources and enables 6.1 ch or 7.1 ch playback using surround back channel. Completely discrete seven channels will improve spatial imaging and enable 360-degree sound localization producing a sound crossing between the surround channels.
- Input source: 6.1 ch
- Surround back speakers need to be installed.
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.
- Use on the DVD with DTS ES logo, particularly on the software containing DTS-ES Matrix soundtrack.
- Playback becomes DTS if no surround back speaker is connected.

■ ES Matrix

This mode is for use with DTS-ES Matrix soundtrack and enables 6.1 ch or 7.1 ch playback using matrix-encoded back channel.
- Input source: 6.1 ch
- Surround back speakers need to be installed.
- This listening mode can be selected only if your Blu-ray Disc/DVD player is digitally connected to the unit or the player's output setting is bitstream.
- Use on the CD, DVD or LD with DTS ES logo, particularly on the software containing DTS-ES Matrix soundtrack.
- Playback becomes DTS if no surround back speaker is connected.

■ Full Mono

In this mode, all speakers output the same sound in mono, so the sound you hear is the same regardless of where you are within the listening room.
- Input source: MONO, STEREO, 5.1 ch, 7.1 ch

■ Game-Action

In this mode, sound localization is distinct with emphasis on bass.
- Input source: MONO, STEREO, 5.1 ch, 7.1 ch
- Surround speakers need to be installed.

■ Game-Rock

In this mode, sound pressure is emphasized to heighten live feel.
- Input source: MONO, STEREO, 5.1 ch, 7.1 ch
- Surround speakers need to be installed.

■ Game-RPG

In this mode, the sound has a dramatic feel with a similar atmosphere to Orchestra mode.
- Input source: MONO, STEREO, 5.1 ch, 7.1 ch
- Surround speakers need to be installed.

■ Game-Sports

Suitable for audio source with much reverberation.
- Input source: MONO, STEREO, 5.1 ch, 7.1 ch
- Surround speakers need to be installed.

■ Mono

Use this mode when watching an old movie with a mono soundtrack, or use it to separately reproduce soundtracks in two different languages recorded in the left and right channels of some movies. It is also suitable for DVDs or other sources containing multiplexed audio.

- Input source: MONO, STEREO, 5.1 ch, 7.1 ch

■ Multichannel

This mode is for use with PCM multichannel sources. The audio from the input source is output as-is, without surround sound processing.

- Input source: 5.1 ch, 7.1 ch

■ Orchestra

Suitable for classical or operatic music, This mode emphasizes the surround channels in order to widen the stereo image, and simulates the natural reverberation of a large hall.

- Input source: MONO, STEREO, 5.1 ch, 7.1 ch
- Surround speakers need to be installed.

■ Pure Audio (European, Australian and Asian models)

This mode reproduces the original sound accurately. Since the audio from the input source is output without surround sound processing and the display and video circuitry are turned off, possible noise sources are minimized for a realistic audio reproduction.

- Input source: MONO, STEREO, 5.1 ch, 7.1 ch
- This mode cannot be selected when Zone 2/Zone 3 is active. Activating Zone 2/Zone 3 when this mode is selected, automatically switches the listening mode to Direct.

■ Stereo

In this mode, sound is output from the front left and right speakers/subwoofer.

- Input source: MONO, STEREO, 5.1 ch, 7.1 ch

■ Studio-Mix

Suitable for rock or pop music, Listening to music in this mode creates a lively sound field with a powerful acoustic image, like being at a club or rock concert.

- Input source: MONO, STEREO, 5.1 ch, 7.1 ch
- Surround speakers need to be installed.

■ T-D

In this mode, you can enjoy a virtual playback of multichannel surround sound even with only two or three speakers. This works by controlling how sounds reach the listener's left and right ears.

- Input source: MONO, STEREO, 5.1 ch, 7.1 ch
- Good results may not be possible if there is too much reverb, so we recommend that you use this mode in an environment with little or no natural reverb.

■ THX

Founded by George Lucas, THX develops stringent standards that ensure movies are reproduced in movie theaters and home theaters just as the director intended. THX Modes carefully optimize the tonal and spatial characteristics of the soundtrack for reproduction in the home-theater environment. They can be used with 2-channel matrixed and multichannel sources. Surround back speaker output depends on the source material and the selected listening mode.

- The THX mode can finely adjust the acoustic and spatial characteristics of the soundtrack for the best reproduction of home theater sound. It will work on 2 ch source and multichannel source. Surround back sound will differ depending on the source and selected listening mode.

– **DTS Neo:6 Cinema + THX Cinema**: The combination mode of DTS Neo:6 Cinema and THX Cinema mode can be used. "Neo:6" and "THX" light on the unit's display.
  - Input source: Stereo
  - Surround speakers need to be installed.

– **DTS Neo:6 Music + THX Music**: The combination mode of DTS Neo:6 Music and THX Music mode can be used. "Neo:6" and "THX" light on the unit's display.
  - Input source: Stereo
  - Surround speakers need to be installed.

– **DTS Neo:6 + THX Cinema**: The combination mode of DTS Neo:6 and THX Cinema mode can be used. "Neo:6" and "THX" light on the unit's display.
  - Input source: 5.1 ch
  - Surround back speakers need to be installed.

– **DTS Neo:6 + THX Music**: The combination mode of DTS Neo:6 and THX Music mode can be used. "Neo:6" and "THX" light on the unit's display.
  - Input source: 5.1 ch
  - Surround back speakers need to be installed.

– **DTS Neo:6 + THX Games**: The combination mode of DTS Neo:6 and THX Games can be used. "Neo:6" and "THX" light on the unit's display.
  - Input source: 5.1 ch
  - Surround back speakers need to be installed.

– **THX Cinema**: THX Cinema mode corrects theatrical soundtracks for playback in a home theater environment. In this mode, THX Loudness Plus is configured for cinema levels and Re-EQ, Timbre Matching, and Adaptive Decorrelation are active.
  - Input source: 5.1 ch, 7.1 ch
  - Surround speakers need to be installed.

– **THX Games**: THX Games mode is meant for spatially accurate playback of game audio, which is often mixed similarly to movies but in a smaller environment. THX Loudness Plus is configured for game audio levels, with Timbre Matching active.
  - Input source: 5.1 ch, 7.1 ch
  - Surround speakers need to be installed.

– **THX Music**: THX Music mode is tailored for listening to music, which is typically mastered at significantly higher levels than movies. In this mode, THX Loudness Plus is configured for music playback and only Timbre Matching is active.
  - Input source: 5.1 ch, 7.1 ch
  - Surround speakers need to be installed.

– **THX S2 Cinema**: THX Select2 Cinema mode plays 5.1 movie using 8 speakers giving you the best possible movie watching experience. In this mode, THX ASA processing blends the side surround speakers and back surround speakers providing the optimal mix of ambient and directional surround sounds.
  • Input source: 5.1 ch
  • Surround back speakers need to be installed.

– **THX S2 Games**: For the replay of stereo and multichannel game audio, the THX Select2 Games mode should be selected. In this mode, THX ASA processing is applied to the surround channels of all 5.1 and 2.0 encoded game sources such as analog, PCM, DTS, and Dolby Digital. This accurately places all game audio surround information creating a full 360 degree playback environment. THX Select2 Games is unique as it gives you a smooth transition of audio in all points of the surround field.
  • Input source: 5.1 ch
  • Surround back speakers need to be installed.

– **THX S2 Music**: For the replay of multichannel music, the THX Select2 Music should be selected. In this mode, THX ASA processing is applied to the surround channels of all 5.1 encoded music sources such as DTS, Dolby Digital, DVD-Audio, etc. to provide a wide and stable rear soundstage.
  • Input source: 5.1 ch
  • Surround back speakers need to be installed.

– **THX Surr EX**: This mode expands 5.1-channel sources for 6.1/7.1- channel playback. It's especially suited to Dolby Digital EX sources. THX Surround EX, also known as Dolby Digital Surround EX, is a joint development between Dolby Laboratories and THX Ltd.
  • Input source: 5.1 ch
  • Surround back speakers need to be installed.

■ TV Logic

Suitable for TV shows produced in a TV studio, This mode enhances the surround effects to the entire sound to give clarity to voices and create a realistic acoustic image.
• Input source: MONO, STEREO, 5.1 ch, 7.1 ch
• Surround speakers need to be installed.

■ Unplugged

Suitable for acoustic instruments, vocals and jazz, This mode emphasizes the front stereo image, giving the impression of being right in front of the stage.
• Input source: MONO, STEREO, 5.1 ch, 7.1 ch
• Surround speakers need to be installed.

■ Reference

Dialogue Normalization
Dialogue Normalization (DialogNorm) is a feature of Dolby Digital, which is used to keep the programs at the same average listening level so the user does not have to change the volume control between Dolby Digital, Dolby Digital Plus and Dolby TrueHD programs. When playing back software which has been encoded in Dolby Digital, Dolby Digital Plus and Dolby TrueHD, sometimes you may see a brief message in the front panel display which will read "DialogNorm: X dB" (X being a numeric value). The display is showing how the program level relates with THX calibration level. If you want to play the program at calibrated theatrical levels, you may wish to adjust the volume. For example, if you see the following message: "DialogNorm: + 4 dB" in the front panel display, to keep the overall output level at THX calibrated loudness, just turn down the volume control by 4dB. However, unlike a movie theater where the playback loudness is preset, you can choose your preferred volume setting for best enjoyment.

THX Cinema Processing
THX is an exclusive set of standards and technologies established by the world-renowned film production company Lucasfilm Ltd. THX grew from George Lucas' personal desire to make your experience of the film soundtrack in both movie theaters and in your home theater as faithful as possible to what the director intended. Movie soundtracks are mixed in special environments called dubbing stages and are designed to be played back in movie theaters with similar equipment and conditions. Most of those soundtracks are remixed using flat response loudspeakers similar to those used in the small home theater environment before being transferred onto Blu-ray Discs, DVD, etc. THX engineers developed patented technologies to accurately translate the sound from the movie theater environment into the home, correcting the tonal and spatial errors that occur. On this product, when the THX indicator is on, THX features are automatically added in Cinema modes (e.g. THX Cinema, THX Surround EX).

Timbre Matching
The human ear changes our perception of a sound depending on the direction from which the sound is coming. In a movie theater, there is an array of surround speakers so that the surround information is all around you. In a home theater, you may only have two speakers located to the side of your head. In this case, the Timbre Matching feature filters the information going to the surround speakers so that they more closely match the tonal characteristics of the sound coming from the front speakers. This ensures seamless panning between the front and surround speakers.

Adaptive Decorrelation
In a movie theater, a large number of surround speakers help create an enveloping surround sound experience. If a home theater only has two sidewall surround speakers, the surround speakers may sound similar to headphones lacking spaciousness and envelopment. Surround sounds will also collapse toward the closet speaker as you move away from the middle seating position. Adaptive Decorrelation slightly changes one surround channel's time and phase relationship with respect to the other surround experience as in a movie theater using only two speakers.

ASA (Advanced Speaker Array)
ASA is a proprietary THX technology which processes the audio on the two side and two back surround speakers for the optional surround sound experience. When you set up your home theater system using eight speaker outputs (Left, Center, Right, Surround Right, Surround Back Right, Surround Back Left, Surround Left, and Subwoofer), be sure to go to the THX Audio Setup screen and choose the setting that closely corresponds to the back speaker spacing. This will reoptimize the surround sound field. ASA is used in three modes: THX Select2 Cinema, THX Select2 Music and THX Select2 Games.

Checking the Input Format

You can check the audio format of the input signals. While audio from the player is being input, press DISPLAY on the remote controller several times to switch the information shown on the main unit display. If "Dolby D 5.1" is displayed in Signal format, the Dolby Digital 5.1 ch signals are being input.

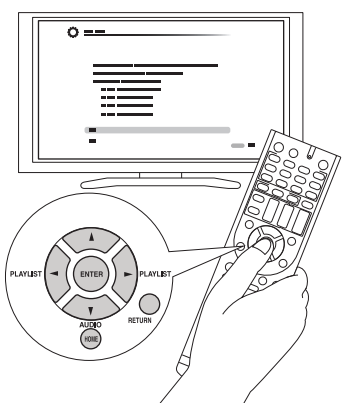
- The number of channels is not displayed when the input signal format is "Dolby Atmos".

Advanced Settings

How to Set

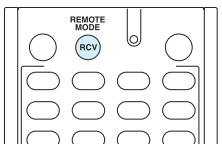
The unit allows you to configure advanced settings, such as to remap the input and input selector, or configure various speaker settings in order to provide even better experience. Make the settings in "Setup" of the HOME menu.

● **Operation**: You can set up by viewing the guidance displayed on the TV screen. To display the guidance, you need to make HDMI connection between the unit and TV. Select the item with the cursor buttons of the remote controller and press ENTER to confirm your selection. To return to the previous screen, press RETURN. To return to the HOME menu, press HOME.

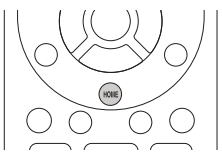


■ Operation

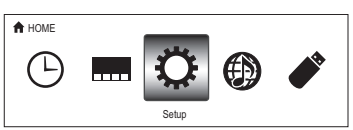
1. Press RCV on the remote controller.
   - Always press RCV first to change the remote controller to RECEIVER mode (the mode to operate this unit) since its mode may be changed to operate another component.



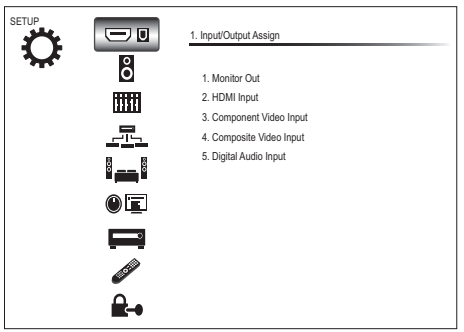
2. Press HOME to display the HOME menu.



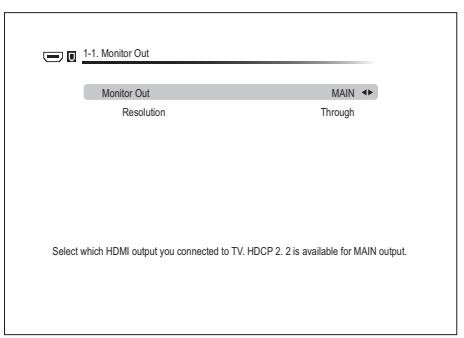
3. With the ◄/► cursors, select "Setup", and then press ENTER.



4. Press ▲/▼ to select the desired menu, and then press ENTER.



5. With the ▲/▼/◄/► cursors, select the desired item to configure the settings.
   - When "ENTER" is displayed on the setting item, press ENTER.


1-1. Monitor Out
Monitor Out
MAIN
Resolution
Through
Select which HDMI output you connected to TV. HDCP 2. 2 is available for MAIN output.

To save changes and finish the setting: Press HOME to exit.

1.Input/Output Assign

Monitor Out

The video input signals input to the unit will be converted when they are output from the HDMI OUT jack to the TV so that their resolution can match that of the TV used.

Setting item	Default Value	Setting Details
Monitor Out	MAIN	Select the HDMI jack to connect the TV. "MAIN": When connecting the TV to the HDMI OUT MAIN jack "SUB": When connecting the TV to the HDMI OUT SUB jack • The resolution of the input signal does not change when output through HDMI OUT SUB jack. "MAIN+SUB": When connecting to both the MAIN and SUB jacks • Video signals input to the composite video input jack or the COMPONENT VIDEO input jacks will be upconverted to HDMI signals and then output from the HDMI output jack. • If "MAIN+SUB" is selected – Only "Through" or "Auto" can be selected in "Resolution". – The resolution of the input signal does not change when output through HDMI OUT SUB jack. • The HDMI jack of this unit is compliant with HDCP2.2 (HDMI OUT MAIN and HDMI IN3 jacks only).
Resolution	Through	Specify the output resolution of the HDMI OUT jacks. The image resolution of the unit will be converted so that it can match the resolution supported by the TV used. "Through": The output resolution will be the same as that of the input signals. "Auto": The resolution will automatically be converted according to the resolution supported by the TV. "480p (480p/576p)", "720p", "1680×720p", "1080i", "1080p", "2560×1080p": Select the desired resolution. "4K": About four times as high resolution as 1080p (3840×2160 or 4096×2160 pixels depending on the resolution supported by the connected TV) • If "1080p" is selected, 1080p/24 input signals will be output with an unchanged resolution. • If the selected resolution is not supported by the monitor, the video is output in the same resolution as the input signal. • If "4K" is selected, video signals may not be output to some types of TV. For details, see "Supported Video Resolution of HDMI OUT MAIN/SUB Jacks" in "Reference Information". • If "Monitor Out" is set to "SUB", this setting will be set to "Through". • You can check the video on the TV while making this setting. Select the value with the cursors and press ENTER. Press RETURN if no video is displayed. (except when "NET", "USB" or "BLUETOOTH" is selected)

HDMI Input

It is possible to change assignment of input selector buttons and the HDMI IN jacks.

Setting item	Default Value	Setting Details
BD/DVD	HDMI 1	"HDMI 1" to "HDMI 6": Desired HDMI IN jack can be assigned to BD/DVD button. If you do not assign a jack, select "-----". To select an HDMI IN jack already assigned to another input selector, change its setting to "-----" first.
CBL/SAT	HDMI 2	"HDMI 1" to "HDMI 6": Desired HDMI IN jack can be assigned to CBL/SAT button. If you do not assign a jack, select "-----". To select an HDMI IN jack already assigned to another input selector, change its setting to "-----" first.
STB/DVR	HDMI 3 (HDCP 2.2)	"HDMI 1" to "HDMI 6": Desired HDMI IN jack can be assigned to STB/DVR button. If you do not assign a jack, select "-----". To select an HDMI IN jack already assigned to another input selector, change its setting to "-----" first.
GAME	HDMI 4	"HDMI 1" to "HDMI 6": Desired HDMI IN jack can be assigned to GAME button. If you do not assign a jack, select "-----". To select an HDMI IN jack already assigned to another input selector, change its setting to "-----" first.
PC	HDMI 5	"HDMI 1" to "HDMI 6": Desired HDMI IN jack can be assigned to PC button. If you do not assign a jack, select "-----". To select an HDMI IN jack already assigned to another input selector, change its setting to "-----" first.
AUX	Front/MHL	The setting cannot be changed.
TV/CD	-----	"HDMI 1" to "HDMI 6": Desired HDMI IN jack can be assigned to TV/CD button. If you do not assign a jack, select "-----". To select an HDMI IN jack already assigned to another input selector, change its setting to "-----" first.
PHONO	-----	"HDMI 1" to "HDMI 6": Desired HDMI IN jack can be assigned to PHONO button. If you do not assign a jack, select "-----". To select an HDMI IN jack already assigned to another input selector, change its setting to "-----" first.

Component Video Input

CBL/SAT button is assigned to COMPONENT VIDEO IN jack as factory default setting. This assignment can be changed if necessary. If you do not assign a jack, select "-----".

Setting item	Default Value	Setting Details
BD/DVD	-----	"COMPONENT": COMPONENT VIDEO IN jack is assigned to BD/DVD button.
CBL/SAT	COMPONENT	"COMPONENT": COMPONENT VIDEO IN jack is assigned to CBL/SAT button.
STB/DVR	-----	"COMPONENT": COMPONENT VIDEO IN jack is assigned to STB/DVR button.
GAME	-----	"COMPONENT": COMPONENT VIDEO IN jack is assigned to GAME button.
PC	-----	"COMPONENT": COMPONENT VIDEO IN jack is assigned to PC button.
AUX	-----	The setting cannot be changed.
TV/CD	-----	"COMPONENT": COMPONENT VIDEO IN jack is assigned to TV/CD button.
PHONO	-----	"COMPONENT": COMPONENT VIDEO IN jack is assigned to PHONO button.

- When you convert video signals input to the COMPONENT VIDEO IN jacks and output them from the HDMI OUT jack, set the output resolution of the player to 480i. If the input has 480p or higher resolution, an error message will appear.
- When "1. Input/Output Assign" - "Monitor Out" is set to "SUB", the 480i/576i component signals only will be output with an unchanged resolution. Video will not be displayed if the TV does not support the resolution.
- When "1. Input/Output Assign" - "Monitor Out" is set to "MAIN" or "MAIN+SUB" and "Resolution" is set to "Through", the 480i/576i component signals will be output with their resolution unchanged. So, TV sets not supporting these resolutions will not be able to display video.

Composite Video Input

It is possible to change assignment of input selector buttons and the COMPOSITE VIDEO IN V1 to 3 jacks.

Setting item	Default Value	Setting Details
BD/DVD	-----	"VIDEO 1" to "VIDEO 3": Desired COMPOSITE VIDEO IN V jack can be assigned to BD/DVD button. If you do not assign a jack, select "-----".
CBL/SAT	VIDEO 1	"VIDEO 1" to "VIDEO 3": Desired COMPOSITE VIDEO IN V jack can be assigned to CBL/SAT button. If you do not assign a jack, select "-----".
STB/DVR	VIDEO 2	"VIDEO 1" to "VIDEO 3": Desired COMPOSITE VIDEO IN V jack can be assigned to STB/DVR button. If you do not assign a jack, select "-----".
GAME	VIDEO 3	"VIDEO 1" to "VIDEO 3": Desired COMPOSITE VIDEO IN V jack can be assigned to GAME button. If you do not assign a jack, select "-----".
PC	-----	"VIDEO 1" to "VIDEO 3": Desired COMPOSITE VIDEO IN V jack can be assigned to PC button. If you do not assign a jack, select "-----".
AUX	-----	The setting cannot be changed.
TV/CD	-----	"VIDEO 1" to "VIDEO 3": Desired COMPOSITE VIDEO IN V jack can be assigned to TV/CD button. If you do not assign a jack, select "-----".
PHONO	-----	"VIDEO 1" to "VIDEO 3": Desired COMPOSITE VIDEO IN V jack can be assigned to PHONO button. If you do not assign a jack, select "-----".

- When "1. Input/Output Assign" - "Monitor Out" is set to "SUB", the 480i/576i composite signals only will be output with an unchanged resolution. Video will not be displayed if the TV does not support the resolution.
- When "1. Input/Output Assign" - "Monitor Out" is set to "MAIN" or "MAIN+SUB" and "Resolution" is set to "Through", the 480i/576i composite signals will be output with their resolution unchanged. So, TV sets not supporting these resolutions will not be able to display video.

Digital Audio Input

It is possible to change assignment of input selector buttons and the DIGITAL IN COAXIAL 1 to 2/OPTICAL jacks.

Setting item	Default Value	Setting Details
BD/DVD	COAXIAL 1	"COAXIAL 1", "COAXIAL 2", "OPTICAL": Desired DIGITAL IN jack can be assigned to BD/DVD button. If you do not assign a jack, select "-----".
CBL/SAT	COAXIAL 2	"COAXIAL 1", "COAXIAL 2", "OPTICAL": Desired DIGITAL IN jack can be assigned to CBL/SAT button. If you do not assign a jack, select "-----".
STB/DVR	-----	"COAXIAL 1", "COAXIAL 2", "OPTICAL": Desired DIGITAL IN jack can be assigned to STB/DVR button. If you do not assign a jack, select "-----".
GAME	-----	"COAXIAL 1", "COAXIAL 2", "OPTICAL": Desired DIGITAL IN jack can be assigned to GAME button. If you do not assign a jack, select "-----".
PC	-----	"COAXIAL 1", "COAXIAL 2", "OPTICAL": Desired DIGITAL IN jack can be assigned to PC button. If you do not assign a jack, select "-----".
AUX	-----	The setting cannot be changed.
TV/CD	OPTICAL	"COAXIAL 1", "COAXIAL 2", "OPTICAL": Desired DIGITAL IN jack can be assigned to TV/CD button. If you do not assign a jack, select "-----".
PHONO	-----	"COAXIAL 1", "COAXIAL 2", "OPTICAL": Desired DIGITAL IN jack can be assigned to PHONO button. If you do not assign a jack, select "-----".

- Supported sampling rates for PCM signals (stereo, mono) from a digital input are 32 kHz/44.1 kHz/ 48 kHz/88.2 kHz/96 kHz/16 bit, 20 bit, 24 bit.

2.Speaker Setup

Allows you to change the speaker configuration such as existence of subwoofer, crossover frequency, and so on. Settings are automatically configured if you use the Automatic Speaker Setup.
Furthermore, you will not be able to select this setting if you have a pair of headphones connected or you are listening through your TV speakers.

Speaker Settings

Change the impedance of the connected speakers, the type of front speaker connection and height speaker type.

Setting item	Default Value	Setting Details
Speaker Impedance	6ohms	Set the impedance of the connected speakers. "4ohms": When any of the connected speakers have 4 Ω or more to less than 6 Ω impedance "6ohms": When the connected speakers all have 6 Ω or more impedance
Front Speakers Type	Normal	Select the type of front speaker connection. "Normal": When front speakers are connected in a normal manner "Bi-Amp": When front speakers are bi-amp connected
Height Speakers Type	Not Use	Set the type of speakers connected to SPEAKERS BACK or HEIGHT speaker terminals. Select from the following options according to the type and layout of the connected speakers: "Not Use", "Front High", "Top Front", "Top Middle", "Dolby Enabled Speaker (Front)", or "Dolby Enabled Speaker (Surround)". • If "Front Speakers Type" is set to "Bi-Amp", this setting will be set to "Not Use". • "Dolby Enabled Speaker (Surround)" cannot be selected if "Speaker Configuration" - "Surround" is set to "None".
Powered Zone 2	No	Set presence of speaker terminal connection of Zone 2. "Yes": When speakers are connected to ZONE2 speaker terminals "No": When speakers are not connected to ZONE2 speaker terminals • If "Front Speakers Type" is set to "Bi-Amp", this setting will be set to "No".

• For impedance, check the indications on the back of the speakers or their instruction manual.

Speaker Configuration

Allows you to change the speaker configuration such as presence or not of each speaker, crossover frequency, and so on. Settings are automatically configured if you use the Automatic Speaker Setup. Audio will not be output while you are making this setting.

Setting item	Default Value	Setting Details
Subwoofer	Yes	Set whether a subwoofer is connected or not. "Yes": When subwoofer is connected "No": When subwoofer is not connected
Front	80Hz (THX)	Select the frequency to start outputting frequencies (crossover frequency) for each channel from "40Hz" to "200Hz". "Full Band": Full band will be output. • "Front" will be fixed to "Full Band" if "Subwoofer" is set to "No", and the bass frequencies of the other channels will be output from the front speakers. To make the settings, refer to the instruction manual of the speakers used.
Center	80Hz (THX)	Select the frequency to start outputting frequencies (crossover frequency) for each channel from "40Hz" to "200Hz". "Full Band": Full band will be output. "None": When no compatible speaker is connected • "Full Band" can only be set if "Front" is set to "Full Band".
Surround	80Hz (THX)	Select the frequency to start outputting frequencies (crossover frequency) for each channel from "40Hz" to "200Hz". "Full Band": Full band will be output. "None": When no compatible speaker is connected • "Full Band" can only be set if "Front" is set to "Full Band".
Back	80Hz (THX)	Select the frequency to start outputting frequencies (crossover frequency) for each channel from "40Hz" to "200Hz". "Full Band": Full band will be output. "None": When no compatible speaker is connected • In any of the following cases, this setting will be set to "None". – "Surround" is set to "None". – "Speaker Settings" - "Front Speakers Type" is set to "Bi-Amp". – "Speaker Settings" - "Height Speakers Type" is set to other than "Not Use". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on. • "Full Band" can only be set if "Surround" is set to "Full Band".
Back ch	2ch	Select the number of channels of the connected surround back speaker. "1ch": When one speaker is connected (Connect to the BACK L terminal) "2ch": When two speakers are connected • The setting cannot be changed if "Back" is set to "None".
Height	None	Select the frequency to start outputting frequencies (crossover frequency) for each channel from "40Hz" to "200Hz". "Full Band": Full band will be output. • In any of the following cases, this setting will be set to "None". – "Speaker Settings" - "Height Speakers Type" is set to "Not Use". – "Speaker Settings" - "Front Speakers Type" is set to "Bi-Amp". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on. • If any type is selected in "Speaker Settings" - "Height Speakers Type", this setting will be set to "80Hz(THX)" as default value. In this case, this setting cannot be set to "None". • "Full Band" can only be set if "Front" is set to "Full Band".

Setting item	Default Value	Setting Details
LPF of LFE	120Hz	Set the low-pass filter for LFE (low-frequency effect) signals in order to pass lower frequency signals than the set value and thus cancel unwanted noises. The low-pass filter will be effective only on sources with LFE channel. Set a frequency from "80Hz" to "120Hz". "Off": Do not use this function
Double Bass	On	Boost bass output by feeding bass sounds from the front left and right, and center speakers to the subwoofer. "On": Bass output will be boosted. "Off (THX)": Bass output will not be boosted. • The setting will not automatically be configured even if you performed the automatic speaker setup. • If "Subwoofer" is set to "No" or if "Front" is set to other than "Full Band", the setting cannot be changed.

- If you're using THX-certified speakers, we recommend the following settings:
  - Set a value "80Hz (THX)" in Crossover frequency.
  - Set a value "80Hz (THX)" in LPF of LFE.
  - Set a value "Off (THX)" in Double Bass.

Speaker Distance

Set the distance from each speaker to the listening position. Settings are automatically configured if you use the automatic speaker setup.

Setting item	Default Value	Setting Details
Unit	feet/meters	Specify the unit of distance for configuring settings. "feet": When setting in feet (0.1ft to 30.0ft, in increments of 0.1ft) "meters": When setting in meters (0.03m to 9.00m, in increments of 0.03m)
Front Left	12.0ft/3.60m	Specify the distance between each speaker and the listening position.
Center	12.0ft/3.60m	Specify the distance between each speaker and the listening position.
Front Right	12.0ft/3.60m	Specify the distance between each speaker and the listening position.
Surround Right	7.0ft/2.10m	Specify the distance between each speaker and the listening position.
Back Right	7.0ft/2.10m	Specify the distance between each speaker and the listening position. • The setting is not displayed if "Speaker Configuration" - "Back" is set to other than "None" and also "Back ch" is set to "1ch". • This setting cannot be changed in any of the following cases. – "Speaker Settings" - "Front Speakers Type" is set to "Bi-Amp". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on.
Back Left	7.0ft/2.10m	Specify the distance between each speaker and the listening position. • The setting is not displayed if "Speaker Configuration" - "Back" is set to other than "None" and also "Back ch" is set to "1ch". • This setting cannot be changed in any of the following cases. – "Speaker Settings" - "Front Speakers Type" is set to "Bi-Amp". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on.

Setting item	Default Value	Setting Details
Back	7.0ft/2.10m	Specify the distance between each speaker and the listening position. • The setting is displayed if "Speaker Configuration" - "Back" is set to other than "None" and also "Back ch" is set to "1ch". • This setting cannot be changed when "Speaker Settings" - "Powered Zone 2" is set to "Yes" and Zone 2 is turned on.
Surround Left	7.0ft/2.10m	Specify the distance between each speaker and the listening position.
Subwoofer	12.0ft/3.60m	Specify the distance between each speaker and the listening position.
Height Left	9.0ft/2.70m	Specify the distance between each speaker and the listening position. • This setting cannot be changed in any of the following cases. – "Speaker Settings" - "Height Speakers Type" is set to "Not Use". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on.
Height Right	9.0ft/2.70m	Specify the distance between each speaker and the listening position. • This setting cannot be changed in any of the following cases. – "Speaker Settings" - "Height Speakers Type" is set to "Not Use". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on.

- When the speaker is set to "No" or "None" in "Speaker Configuration", the settings for "Speaker Distance" cannot be changed:
- Default values vary depending on the regions.

Level Calibration

Adjust the level of each speaker with the built-in test tone. Settings are automatically configured if you use the Automatic Speaker Setup.

Setting item	Default Value	Setting Details
Front Left	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level.
Center	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level.
Front Right	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level.
Surround Right	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level.
Back Right	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level. • The setting is not displayed if "Speaker Configuration" - "Back" is set to other than "None" and also "Back ch" is set to "1ch". • This setting cannot be changed in any of the following cases. – "Speaker Settings" - "Front Speakers Type" is set to "Bi-Amp". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on.
Back Left	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level. • The setting is not displayed if "Speaker Configuration" - "Back" is set to other than "None" and also "Back ch" is set to "1ch". • This setting cannot be changed in any of the following cases. – "Speaker Settings" - "Front Speakers Type" is set to "Bi-Amp". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on.

Setting item	Default Value	Setting Details
Back	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level. • The setting is displayed if "Speaker Configuration" - "Back" is set to other than "None" and also "Back ch" is set to "1ch". • This setting cannot be changed when "Speaker Settings" - "Powered Zone 2" is set to "Yes" and Zone 2 is turned on.
Surround Left	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level.
Subwoofer	0dB	Select a value between "-15dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level.
Height Left	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level. • This setting cannot be changed in any of the following cases. – "Speaker Settings" - "Height Speakers Type" is set to "Not Use". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on.
Height Right	0dB	Select a value between "-12dB" to "+12dB". A test tone will be output each time you change the value. Select the desired level. • This setting cannot be changed in any of the following cases. – "Speaker Settings" - "Height Speakers Type" is set to "Not Use". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on.

- In the following cases, the settings for "Level Calibration" cannot be changed:
  - The speaker is set to "No" or "None" in "Speaker Configuration".
  - Mute (MUTING) is set.
- The test tone is output at the standard level for THX, which is 0dB (absolute volume setting 82). If you normally listen at volume settings below this, be careful because the test tone will be much louder.
- If you are using a handheld sound pressure level meter, adjust the level of each speaker to 75dB SPL at the listening position, measured in C-Weighting and slow reading.

THX Audio Setup

Setting item	Default Value	Setting Details
Surr Back Speaker Spacing	>4ft or >1.2m	Select the distance between the surround back speakers from the following values. When "Speaker Distance" - "Unit" is set to "feet".: Select a value from "<1ft", "1ft-4ft", and ">4ft". When "Speaker Distance" - "Unit" is set to "meters".: Select a value from "<0.3m", "0.3m-1.2m", and ">1.2m". • In the following cases, the setting cannot be changed: – "Speaker Configulation" - "Back" is set to "None". – "Speaker Configulation" - "Back ch" is set to "1ch". – "Speaker Settings" - "Powered Zone 2" is set to "Yes" and also Zone2 is set to on.
THX Ultra2/ Select2 Subwoofer	No	Set "Yes" or "No" of the connection of the THX certified subwoofer. "Yes": When a THX-certified subwoofer is connected "No": When a THX-certified subwoofer is not connected • The setting cannot be changed if "Speaker Configulation" - "Subwoofer" is set to "No".
BGC	Off	If your listening room layout (for practical or aesthetic reasons) locates most of the listeners close to the rear wall, the resulting bass level can be sufficiently reinforced by the boundary that the overall sound becomes "boomy". THX Select2 Plus receivers contain a Boundary Gain Compensation (BGC) feature to improve bass balance. "On": Use this function "Off": Do not use this function • In the following cases, the setting cannot be changed: – "Speaker Configulation" - "Subwoofer" is set to "No". – "THX Ultra2/Select2 Subwoofer" is set to "No".

Setting item	Default Value	Setting Details
Loudness Plus	On	When the setting is set to "On", it is possible to enjoy even subtle nuances of audio expression at low volume. This is only available when the THX listening mode is selected. "On" : Use this function "Off" : Do not use this function **THX Loudness Plus** THX Loudness Plus is a new volume control technology featured in THX Ultra2 Plus™ and THX Select2 Plus™ Certified receivers. With THX Loudness Plus, home theater audiences can now experience the rich details in a surround mix at any volume level. A consequence of turning the volume below Reference Level is that certain sound elements can be lost or perceived differently by the listener. THX Loudness Plus compensates for the tonal and spatial shifts that occur when the volume is reduced by intelligently adjusting ambient surround channel levels and frequency response. This enables users experience the true impact of soundtracks regardless of the volume setting. THX Loudness Plus is automatically applied when listening in any THX listening mode. The new THX Cinema, THX Music, and THX Games modes are tailored to apply the proper THX Loudness Plus settings for each type of content.

3.Audio Adjust

Configure various settings related to sound, such as settings for listening to multiplex audio or multilingual TV broadcasts and sound field settings for listening modes.

Multiplex/Mono

Setting item	Default Value	Setting Details
Multiplex Input Channel	Main	Set the audio channel or language to be output when playing multiplex audio or multilingual TV broadcasts etc. "Main": Main channel only "Sub": Sub channel only "Main/Sub": Main and sub channels will be output at the same time. • If multiplex audio is being played, "1+1" will be displayed when DISPLAY is pressed.
Mono Input Channel	Left+Right	Set the input channel to use for playing any 2 ch digital source such as Dolby Digital, or 2-ch analog/PCM source in the Mono listening mode. "Left": Left channel only "Right": Right channel only "Left+Right": Left and right channels
Mono Output Speaker	Center	Select the speaker to output monaural audio in the Mono listening mode. "Center": Audio is output from the center speaker. "Left/Right": Audio is output from the front L/R speakers. • The setting will be fixed to "Left/Right" if "Speaker Configuration" - "Center" is set to "None".

Dolby

Make the settings for Dolby listening mode.

Setting item	Default Value	Setting Details
Loudness Management	On	Enable the Late Night function that allows you to enjoy surround sound of Dolby TrueHD playback even in low volume. "On": Use this function "Off": Do not use this function
Center Spread	Off	Adjust the width of the front sound field created during Dolby Surround listening mode playback. "On": The sound field is spread to left and right. "Off": The sound field is centralized. • The setting will be fixed to "Off" if "Speaker Configuration" - "Center" is set to "None".

DTS

Make the settings for DTS Neo:6 Music listening mode.

Setting item	Default Value	Setting Details
Neo:6 Music Center Image	2	Adjust the width of the sound field of the front channel when playing in the DTS Neo:6 Music listening mode. "0" to "5": Selecting a smaller value brings the sound field of the front channel to the center while selecting a larger value spreads the sound field of the front channel to left and right.

Theater-Dimensional

Make the settings for Theater-Dimensional mode.

Setting item	Default Value	Setting Details
Listening Angle	Wide	Set the angle of the front left and right speakers relative to the listening position when playing in the Theater-Dimensional listening mode. "Narrow": Less than 30° "Wide": Greater than 30°

- Values recommended for "Listening Angle" are: 20° when "Narrow" is selected and 40° when "Wide" is selected.

LFE Level

Set the low-frequency effect (LFE) level of the Dolby Digital, DTS, Multichannel PCM, Dolby TrueHD, DTS-HD Master Audio and DSD signals.

Setting item	Default Value	Setting Details
Dolby Digital	0dB	Select the low-frequency effect (LFE) level of each type of signal from "0dB" to "-∞dB". If the low-frequency effect sound is too strong, select "-20dB" or "-∞dB". • This setting works on LFE channel volume of Dolby Digital and Dolby Digital Plus sources.
DTS	0dB	Select the low-frequency effect (LFE) level of each type of signal from "0dB" to "-∞dB". If the low-frequency effect sound is too strong, select "-20dB" or "-∞dB". • This setting works on LFE channel volume of DTS and DTS-HD High Resolution sources.
Multich PCM	0dB	Select the low-frequency effect (LFE) level of each type of signal from "0dB" to "-∞dB". If the low-frequency effect sound is too strong, select "-20dB" or "-∞dB".
Dolby TrueHD	0dB	Select the low-frequency effect (LFE) level of each type of signal from "0dB" to "-∞dB". If the low-frequency effect sound is too strong, select "-20dB" or "-∞dB".
DTS-HD Master Audio	0dB	Select the low-frequency effect (LFE) level of each type of signal from "0dB" to "-∞dB". If the low-frequency effect sound is too strong, select "-20dB" or "-∞dB".
DSD	0dB	Select the low-frequency effect (LFE) level of each type of signal from "0dB" to "-∞dB". If the low-frequency effect sound is too strong, select "-20dB" or "-∞dB". • This setting works on LFE channel volume of DSD (Super Audio CD) sources.

4.Source Setup

Adjust the volume level difference among the multiple devices connected to this unit, rename an input selector, or adjust the image quality. The setting can be separately set to each input selector button. When you select a desired input to check the video or audio, start playback of the connected device.

AccuEQ Room Calibration

Setting item	Default Value	Setting Details
AccuEQ Room Calibration	Off	Enable/disable the sound field set in automatic speaker setup "On": Enable this function "Off": Disable this function • In the following cases, the setting cannot be changed: – Automatic speaker setup is not performed. – Headphones are connected.

IntelliVolume

Setting item	Default Value	Setting Details
IntelliVolume	0dB	Adjust the volume level difference between the devices connected to the unit. Select a value between "-12dB" to "+12dB". Set a negative value if the volume of the target device is larger than the others and a positive value if smaller. • This function is not effective in Zone 2/Zone 3.

Name Edit

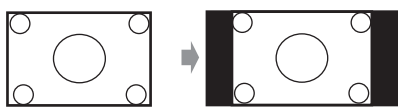
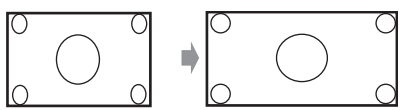
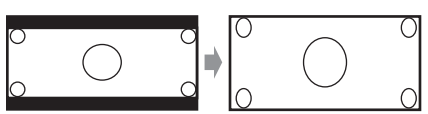
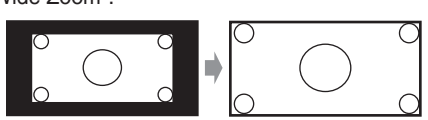
Set an easy name to each input. The set name will be shown on the main unit display.

Setting item	Default Value	Setting Details
Name	Input name	1. Select a character or symbol with the cursors and press ENTER. Repeat it to input 10 or less characters. "Shift": Switches between upper and lower cases. (Pressing +10 on the remote controller also toggles between upper and lower cases.) "←" or "→": Moves the cursor to the arrow direction. "Back Space": Removes a character on the left of the cursor. "Space": Puts a space. • Pressing CLR on the remote controller will remove all the input characters. 2. After inputting, select "OK" with the cursors and press ENTER. The input name will be saved.

- To name a preset radio station, press TUNER on the remote controller, select AM/FM and select the preset number.
- It cannot be set if the input is "NET", "USB" or "BLUETOOTH".

Picture Adjust

Adjust the image quality. (Possible only when the video player is connected to the HDMI OUT MAIN jack) If you adjust it by checking the video, press ENTER. Press RETURN to return the screen to the previous status.

Setting item	Default Value	Setting Details
Wide Mode	Auto	Set the aspect ratio. "Auto": The aspect ratio will automatically be set according to the input signals and the monitor output setting. "4:3":  "Full":  "Zoom":  "Wide Zoom":  • When a 3D or 4K video source is input, this setting is set to "Full". Furthermore, for some resolutions, this setting may be disabled and set to "Full".

Setting item	Default Value	Setting Details
Picture Mode	Custom	An appropriate image quality setting for cinema or game will be selected. You can also adjust each item to obtain your favorite image quality. "Custom": The items from "Game Mode" to "Color Temperature" below can be adjusted as desired. "Cinema": When the video source is cinema "Game": When the video source is game "Standard": The resolution will be changed but the image quality will not be adjusted. "Bypass": Both the resolution and image quality will not be adjusted. • If you select "Bypass", the on-screen display function will be disabled.
Game Mode	Off	Change to the setting suitable for game. Also correct the delay of video signals of the game console if any. "On": Use this function "Off": Do not use this function • If you select "On", the delay will be corrected but the image quality will be lower. • The setting will be fixed to "Off" if "1. Input/Output Assign" - "Monitor Out" -" Resolution" is set to "4K".
Film Mode	Auto	Change to the setting suitable for film. "Auto": Image processing suitable for film will be executed. "Video": "Film Mode" will not be applied and the input signals will be processed as video source.
Edge Enhancement	Off	Adjust the sharpness of the outline of image. Select from "Off", "Low", "Mid" (Middle), and "High". • The setting will be fixed to "Off" if "Game Mode" is set to "On". • When the horizontal resolution of the output video is 2,000 TV lines or more, this setting is set to "Off".
Noise Reduction	Off	Reduces the noise of the screen. Select from "Off", "Low", "Mid" (Middle), and "High". • The setting will be fixed to "Off" if "Game Mode" is set to "On".
Brightness	0	Adjust brightness of the screen. Select a value between "-50" to "+50".
Contrast	0	Adjust contrast of the screen. Select a value between "-50" to "+50".
Hue	0	Correct hue of the screen. Select a value between "-50" to "+50".
Saturation	0	Adjust saturation of the screen. Select a value between "-50" to "+50".
Color Temperature	Normal	Set color temperature of the screen. Select from "Warm", "Normal" and "Cool".

- In the following cases, the settings for "Picture Adjust" cannot be changed:
  – "NET", "USB" or "BLUETOOTH" is selected.
  – "1. Input/Output Assign" - "Monitor Out" is set to "SUB".
- Press CLR on the remote controller if you return all the settings from "Game Mode" through "Color Temperature" to their default value.

Audio Selector

Make the audio input setting. The setting can be separately set to each input selector button. Select the input selector to configure.

Setting item	Default Value	Setting Details
Audio Selector	–	Allows you to select prior input source. "ARC": When giving priority to input signal from ARC compatible TV. • The setting can be selected only when "7. Hardware Setup" - "Audio Return Channel" is set to "Auto" and also the "TV/CD" input is selected. "HDMI": When giving priority to input signal from HDMI jacks • The setting can be selected only when the input is assigned to the HDMI IN jack in the "HDMI Input" setting. "COAXIAL" (Coaxial input): When giving priority to input signal from COAXIAL IN jacks. • The setting can be selected only when the input is assigned to the COAXIAL jack in the "Digital Audio Input" setting. "OPTICAL" (Optical input): When giving priority to input signal from OPTICAL IN jacks. • The setting can be selected only when the input is assigned to the OPTICAL jack in the "Digital Audio Input" setting. "Analog": To always output analog audio independently of the input signal
Fixed Mode	Off	Specify an input signal when "HDMI", "COAXIAL (Coaxial input)", or "OPTICAL (Optical input)" is selected for "Audio Selector". Set this item if noise is produced, or truncation occurs at the beginning of a track that follows a gap when playing PCM or DTS sources. "Off": To play an analog signal when there is no digital signal. "PCM": To fix the input source to PCM (except for Multichannel PCM). "DTS": To fix the input source to DTS (except for DTS-HD) • Changing "Audio Selector" changes the setting to "Off". • The setting cannot be changed when "PHONO", "TUNER", "NET", "USB" or "BLUETOOTH" input is selected or the WHOLE HOUSE MODE function is on.

5.Listening Mode Preset

You can preset your favorite listening mode to each input. (For example, you can always apply straight decode to the Dolby TrueHD source of Blu-ray Disc to play it in unchanged sound field.)
When the list of input sources is displayed, set the signal type and listening mode.
Although it is possible to select the listening mode during playback, the selected mode will be reset when the unit enters standby mode.

Setting item	Default Value	Setting Details
Analog/PCM	Last Valid	Set the listening mode for playing PCM signals of CD and analog signals of record and cassette tape.
Mono/Multiplex Source	Last Valid	Set the listening mode for playing Dolby Digital and other digital signals recorded in monaural or multiplex audio.
2ch Source	Last Valid	Set the listening mode for playing Dolby Digital and other digital signals recorded in 2 channels.
Dolby D/Dolby D Plus/TrueHD	Last Valid	Set the listening mode for playing Dolby Digital, Dolby Digital Plus and Dolby TrueHD signals.
DTS/DTS-ES/DTS-HD	Last Valid	Set the listening mode for playing digital audio signals in DTS and DTS-HD High Resolution formats. Select the listening mode specified for Blu-ray or such other DTS-HD Master Audio source.
Other Multich Source	Last Valid	Set the listening mode for playing DSD signals of DVD-Audio and Super Audio CD that are input from HDMI IN jack.

- Available listening modes vary depending on the input signal.
- Setting "Last Valid" will always select the last selected mode.
- Only "Analog" can be set to the "TUNER" input.
- "Digital" and "TrueHD" can be set to the "NET" and "USB" inputs.
- Only "Digital" can be set to the "BLUETOOTH" input.

6.Miscellaneous

Volume Setup

Make the detailed volume setting of the unit.

Setting item	Default Value	Setting Details
Volume Display	Absolute	Switch the volume display between the absolute value and relative value. The absolute value 82 is equivalent to the relative value 0dB. "Absolute": Absolute value such as "1" to "99" "Relative(THX)": Relative value such as "-81dB" and "+18dB" • If the absolute value is set to 82, "82Ref" will appear on the display and the "THX" indicator will flash.
Muting Level	-∞dB	Set the volume lowered from the listening volume when muting is on. Select a value from "-∞dB", "-50dB" to "-10dB". (in 10dB increments)
Maximum Volume	Off	Set the maximum value to avoid too high volume. Select a value from "Off", "50" to "99".
Power On Volume	Last	Set the volume level of when the power is turned on. Select a value from "Last" (Volume level before entering standby mode), "Min", "1" to "99" and "Max". • You cannot set a higher value than that of "Maximum Volume".
Headphone Level	0dB	Adjust the volume level difference between speakers and headphones. Select a value between "-12dB" to "+12dB".

OSD Setup

Make the setting of on-screen display function that can display the setting menu screen, volume operation screen and the like on the TV.

Setting item	Default Value	Setting Details
On Screen Display	On	Set whether or not to display the operation screen on the TV. "On": The operation screen will be displayed on the TV. "Off": The operation screen will not be displayed on the TV. • The operation screen may not be displayed depending on the input signal even if "On" is selected. If the operation screen is not displayed, change the resolution of the connected device.
Language	English	Select the on-screen display language.
Screen Saver	3min	Set the time to start the screen saver. Select a value from "3min", "5min", "10min" and "Off".

7.Hardware Setup

Tuner

Setting item	Default Value	Setting Details
AM/FM Frequency Step (North American and Taiwanese models)	10kHz/200kHz	Select a frequency step depending on your area of residence. Select "10kHz/200kHz" or "9kHz/50kHz". • When this setting is changed, all radio presets are deleted. • Default values vary depending on the regions.
AM Frequency Step (European, Australian and Asian models)	9kHz	Select a frequency step depending on your area of residence. Select "10kHz" or "9kHz". • When this setting is changed, all radio presets are deleted. • Default values vary depending on the regions.

HDMI

Setting item	Default Value	Setting Details
HDMI CEC (RIHD)	Off	Setting to "On" enables the input selection link and other link functions with HDMI connected CEC compliant device. "On": Use this function "Off": Do not use this function • Depending on the TV set, a link may need to be configured on the TV. • This function is effective only when the device is connected to the HDMI OUT MAIN terminal. • Setting to "On" and closing the on-screen menu displays the name of the CEC-compatible components and "RIHD On" on the display. • Power consumption in standby mode may increase if "On" is set. (Depending on the TV status, the unit will enter the normal standby mode.) • If you operate the MASTER VOLUME control of the unit when this setting is set to "On" and you are listening to the audio through the speakers of your TV, audio will be output also from the speakers connected to the unit. If you want to output from only either of them, change the unit or TV settings, or reduce the volume of the unit. • If abnormal operation occurs when you set the setting to "On", set it to "Off". • When connecting a non-CEC compatible component, or when you are not sure whether it is compatible, set the setting to "Off". • When changing this setting, turn off and then on again the power of all connected components.
HDMI Through	Off	You can display the video of an HDMI connected player on the TV even if the unit is in standby mode. This setting is effective only for an input selector to which an HDMI jack is assigned in "HDMI Input". It cannot be set to any other input selector unless an HDMI jack is assigned to it. "Off": The setting is disabled. Video of device connected to any jack will not be displayed. "BD/DVD", "CBL/SAT", "STB/DVR", "GAME", "PC", "AUX", "TV/CD", "PHONO": Video of the device connected to the HDMI IN jack assigned to each input will be displayed on the TV. "Last": Video of the device connected to the HDMI IN jack assigned to the input selector that was selected immediately before the unit enters standby mode will be displayed on the TV. "Auto": Video of all the devices connected to the HDMI IN jacks will be output to the TV. "Auto (Eco)": Video of all the devices connected to the HDMI IN jacks will be output to the TV. If you select this setting when using a CEC-compatible TV, you can reduce the power consumption in standby mode. • When "HDMI Through" is enabled, the power consumption increases even when the unit is on standby. However, the increase in power consumption is kept to a minimum by automatically entering the HYBRID STANDBY mode, where only the essential circuit is operating. • "Auto" and "Auto(Eco)" cannot be selected if "HDMI CEC (RIHD)" is set to "Off". • When changing the setting, turn off and then on again the power of all connected components.

Setting item	Default Value	Setting Details
Audio TV Out (MAIN)	Off	You can enjoy audio through the speakers of the HDMI connected TV while this unit is on. "On": Use this function "Off": Do not use this function • If you select "On", set "HDMI CEC (RIHD)" to "Off." • The setting is fixed to "Auto" if "HDMI CEC (RIHD)" is set to "On". • Listening mode cannot be changed if "Audio TV Out (MAIN)" is set to "On" and audio is being output through the speakers of the TV. • Depending on your TV set or input signal of the component, audio may not output through the speakers of the TV even if this setting is set to "On". In such case, audio is output from the speakers of the unit. • If you operate the MASTER VOLUME control of the unit when "Audio TV Out (MAIN)" or "HDMI CEC (RIHD)" is set to "On" and you are listening to the audio through the speakers of your TV, audio will be output from the unit. If you do not want to output audio from the unit, change the unit or TV settings, or reduce the volume of the unit. • The setting is fixed to "Off" if "1. Input/Output Assign" - "Monitor Out" is set to "SUB".

Setting item	Default Value	Setting Details
Audio TV Out (SUB)	Off	You can enjoy audio through the speakers of the HDMI connected TV while this unit is on. "On": Use this function "Off": Do not use this function • Listening mode cannot be changed while "Audio TV Out (SUB)" is set to "On" and audio is being output through the speakers of the TV. • Depending on your TV set or input signal of the component, audio may not output through the speakers of the TV even if this setting is set to "On". In such case, audio is output from the speakers of the unit. • If you operate the MASTER VOLUME control of the unit when "Audio TV Out (SUB)" or "HDMI CEC (RIHD)" is set to "On" and you are listening to the audio through the speakers of your TV, audio will be output from the unit.. If you do not want to output audio from the unit, change the unit or TV settings, or reduce the volume of the unit. • The setting is fixed to "Off" if "1. Input/Output Assign" - "Monitor Out" is set to "MAIN".
Audio Return Channel	–	You can enjoy sound of the HDMI connected ARC compatible TV through the speakers connected to the unit. To use this function, set "HDMI CEC (RIHD)" to "On" in advance. "Auto": When enjoying the TV sound through the speakers connected to the unit "Off": When not using the ARC function
Lip Sync	On	This setting automatically corrects any desynchronization between the video and audio signals based on data from the HDMI LipSync compatible TV. "On": Automatic correction will be enabled. "Off": Automatic correction will be disabled.

Setting item	Default Value	Setting Details
InstaPrevue Sub Window	Multi	Change the preview display of the video input through HDMI, which will be displayed using "InstaPrevue" in the HOME menu. Set how to display preview thumbnails. "Multi": Displays all the thumbnails of HDMI IN1, 2, 3, 4 and Front at once. "Single": Displays each thumbnail individually. • Depending on the video source, the preview thumbnails configured in "InstaPrevue" may not be displayed properly.
InstaPrevue Position	Bottom/ Lower Right	Change the preview display of the video input through HDMI, which will be displayed using "InstaPrevue" in the HOME menu. Set the position to display preview thumbnails. When "Multi" is selected for "Sub Window": Select from "Top", "Bottom", "Left" and "Right". When "Single" is selected for "Sub Window": Select from "Upper Left", "Upper Right", "Lower Left" and "Lower Right". • Depending on the video source, the preview thumbnails configured in "InstaPrevue" may not be displayed properly.

Auto Standby

Setting item	Default Value	Setting Details
Auto Standby	On/Off	This setting places the unit on standby automatically after 20 minutes of inactivity without any video or audio input. "On": The unit will automatically enter standby mode ("ASb" will light). "Off": The unit will not automatically enter standby mode. • "Auto Standby" is appeared on the display and menu screen 30 seconds before the Auto Standby comes on. • "Auto Standby" does not work when Zone 2/ Zone 3 is active. • Default values vary depending on the regions.
HDMI Through	Off	Enable or disable "Auto Standby" while "HDMI Through" is on. "On": The setting will be enabled. "Off": The setting will be disabled. • The setting cannot be set to "On" if "Auto Standby" is set to "Off".

• When "HDMI Through" is used, the power consumption increases even when the unit is on standby. However, the increase in power consumption is kept to a minimum by automatically entering the HYBRID STANDBY mode, where only the essential circuit is operating.

Network

Make the network setting.

- When LAN is configured with a DHCP, set "DHCP" to "Enable" to configure the setting automatically. ("Enable" is set by default) To assign fixed IP addresses to each components, you must set "DHCP" to "Disable" and assign an address to this unit in "IP Address" as well as set information related to your LAN, such as Subnet Mask and Gateway.

Setting item	Default Value	Setting Details
Network Standby	Off	You can turn on the power of the unit via network using an application such as Onkyo Remote. "On": Use this function "Off": Do not use this function • When "Network Standby" is used, the power consumption increases even when the unit is on standby. However, the increase in power consumption is kept to a minimum by automatically entering the HYBRID STANDBY mode, where only the essential circuit is operating.
Wi-Fi	Off (Wired)	Connect the unit to network via wireless LAN router. "On": Wireless LAN connection "Off (Wired)": Wired LAN connection • This function may not work depending on your Bluetooth-enabled device.
Wi-Fi Setup	–	You can configure wireless LAN settings by pressing ENTER when "Start" is displayed.
Wi-Fi Status	–	The information of the connected access point will be displayed. "SSID": SSID of the connected access point. "Security": Security method of the connected access point. "Signal": Signal strength of the connected access point. "Status": Status of the connected access point.
MAC Address	–	This is the MAC address of the AV receiver. This value is specific to the component and cannot be changed.
DHCP	Enable	"Enable": Auto configuration by DHCP "Disable": Manual configuration without DHCP • If selecting "Disable", you must set "IP Address", "Subnet Mask", "Gateway", and "DNS Server" manually.
IP Address	–	Displays/Sets the IP address.
Subnet Mask	–	Displays/Sets the subnet mask.
Gateway	–	Displays/Sets the gateway.
DNS Server	–	Displays/Sets the primary DNS server.
Proxy URL	–	Displays/Sets the proxy server URL.
Proxy Port	–	Displays/Sets the proxy server port number when you enter "Proxy URL".
Network Check	–	You can check the network connection. Press ENTER when "Start" is displayed.

- Wait for a while if "Network" is not shown on the screen. It will appear when the network function is started up.

Bluetooth

Setting item	Default Value	Setting Details
Bluetooth	On	Select whether or not to use the Bluetooth function. "On": Enables connection with a Bluetooth-enabled device by using the Bluetooth function. Select "On" also when making various Bluetooth settings. "Off": When not using the Bluetooth function
Direct Change	On	The input of the unit will automatically be switched to "BLUETOOTH" when connection is made from a Bluetooth-enabled device to the unit. "On": The input will automatically become "BLUETOOTH" when a Bluetooth-enabled device is connected. "Off": The function is disabled. • If the input is not switched automatically, set to "Off" and change the input manually.
Auto Reconnect	On	This function automatically reconnects to the Bluetooth-enabled device connected last when you change the input selector to "BLUETOOTH". "On": Use this function "Off": Do not use this function • This function may not work depending on your Bluetooth-enabled device.
Wakeup via Bluetooth	Off	This function wakes up the unit on standby by connecting a Bluetooth-enabled device. "On": Use this function "Off": Do not use this function • Setting to "On" increases the power consumption even when the unit is on standby. However, the increase in power consumption is kept to a minimum by automatically entering the HYBRID STANDBY mode, where only the essential circuit is operating. • The setting is fixed to "Off" if "Direct Change" is set to "Off".
Pairing Information	–	When paring is performed, the information of the previous pairing stored in this unit will be initialized. Pressing ENTER when "Clear" is displayed initializes the pairing information stored in this unit. • This function does not initialize the pairing information on the Bluetooth-enabled device. When pairing the unit again with the device, be sure to clear the pairing information on the Bluetooth-enabled device in advance. For information on how to clear the pairing information, refer to the Bluetooth-enabled device's instruction manual.
Device	–	Displays the name of the Bluetooth-enabled device connected to the unit. • The name is not displayed when "Status" is "Ready" and "Now Pairing ...".
Status	–	Displays the status of the Bluetooth-enabled device connected to the unit. "Ready": Not paired "Now Pairing ...": Paired "Connected": Successfully connected

• Wait for a while if "Bluetooth" cannot be selected. It will appear when the network function is started up.

Firmware Update

Setting item	Default Value	Setting Details
Update Notice	Enable	Availability of a firmware update will be notified via network. "Enable": Notify updates "Disable": Do not notify updates
Version	–	The current firmware version will be displayed.
Update via NET	–	Press ENTER to select when you want to update the firmware via network. • You will not be able to select this setting if you do not have Internet access or there is nothing to update.
Update via USB	–	Press ENTER to select when you want to update the firmware via USB. • You will not be able to select this setting if a USB storage device is not connected or there is nothing to update in the USB storage device.

- Wait for a while if "Firmware Update" cannot be selected. It will appear when the network function is started up.

Initial Setup

You can make the initial setup from the setup menu.
- Setting is not possible if "1. Input/Output Assign" - "Monitor Out" is set to "SUB".
- Wait for a while if "Initial Setup" cannot be selected. It will appear when the network function is started up.

8.Remote Controller Setup

Setting item	Default Value	Setting Details
Remote ID	1	Select an ID for the unit's remote controller from "1", "2", and "3" to prevent interference between the unit and other Onkyo components that are installed in the same room. After changing the ID on the main unit, change the ID on the remote controller accordingly with the following procedure. 1. While holding down RCV, press Q SETUP for about 3 seconds until the remote indicator lights. 2. With the number buttons, press one of 1, 2, and 3. The remote indicator flashes twice.
Remote Mode Setup	–	Input and register the remote controller code of other devices. • For registration of the remote control code, refer to "Operating Other Components with the Remote Controller".

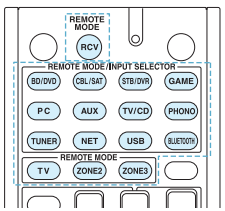
9.Lock Setup

Setting item	Default Value	Setting Details
Setup	Unlocked	The Setup menu will be locked to protect the settings. "Locked": The menu is locked. "Unlocked": The menu is unlocked.

Operating Other Components Using Remote Controller

Functions of REMOTE MODE Buttons

You can control any other device than this unit by programming a specified remote control code to a REMOTE MODE button of the remote controller. Register a remote control code to a desired REMOTE MODE button and press it to enter the remote mode that allows you to operate the corresponding device.



∗ The RCV and ZONE2/ZONE3 buttons cannot be programmed.

Programming Remote Control Codes

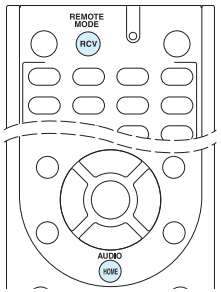
For information on the configuration and operation of Onkyo components with RI jack, refer to "Connecting and Operating Onkyo RI Components". Furthermore, the following REMOTE MODE buttons are preprogrammed with remote control codes.

BD/DVD: Onkyo Blu-ray Disc/DVD player
TV/CD: Onkyo CD player
STB/DVR: Apple TV

■ Searching in the Setup Menu

You can search a remote control code and register it to a desired REMOTE MODE button in the unit's Setup menu.

1. Press RCV and then press HOME on the remote controller.



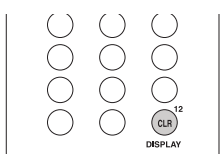
2. With the cursors, select "Setup", and then press ENTER.
3. With the cursors, select "8. Remote Controller Setup" - "Remote Mode Setup" and press ENTER.
4. With the cursors, select the remote mode for which you want to register a remote control code and press ENTER to display the sub-category selection screen.
5. With the cursors, select the target sub-category, and then press ENTER to display the brand name input screen.
6. Select a character with the cursors and press ENTER. Repeat it to enter the first three characters of the brand name.
7. With the cursors, select "Search", and then press ENTER.
   - After a search is done, the list of possible brand names is displayed. If the brand name list is not displayed, select "Not Listed" with the cursors and press ENTER to return to the brand name input screen in step 6.
8. With the cursors, select the target brand name, and then press ENTER.
   - Once you decided the corresponding brand name, the remote control code of the brand and how to register it will be displayed on the TV screen.
9. Follow the guidance displayed on the TV screen.
10. If the component can successfully be operated with its registered remote control code, select "OK" with the cursors and press ENTER.

- Only TV remote control codes can be entered for TV.
- Program a remote control code in accordance with the input since each button also works as the input selector. (For example, when the CD player is connected to the TV/CD jack, program the remote control code for the CD player to TV/CD)
- If the component cannot be operated, select "Try Next Code" with the cursors and press ENTER to display another code.
- It is possible to operate an MHL-enabled mobile device with the unit's remote controller by registering the code of the MHL-enabled mobile device below to the unit's remote controller. Operation may be unstable or incorrect depending on the mobile device used.
  33101 (North American and Taiwanese models)
  32910 (European, Australian and Asian models)

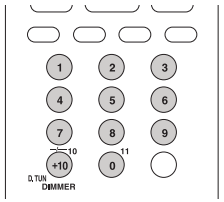
■ Consulting the Remote Control Code List

Find the remote control code in the remote control code list.

1. Look up the Remote Control Code List for the corresponding remote control code.
   - The codes in the Remote Control Code List are those known as of the date of publication and may be changed.
   - Only TV remote control codes can be entered for TV.
   - Program a remote control code in accordance with the input since each button also works as the input selector. (For example, when the CD player is connected to the TV/CD jack, program the remote control code for the CD player to TV/CD)
2. Press DISPLAY for 3 or more seconds while holding down the REMOTE MODE button to which you want to register the remote control code.
   - Once you entered the input mode, the remote indicator will light.



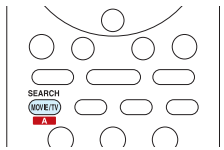
3. With the number buttons, enter the 5-digit remote control code within 30 seconds.
   - The registration is complete when the remote indicator flashes twice. The remote indicator flashes once slowly when registering the remote control code fails. Try the registration again.



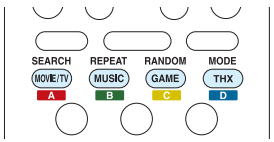
■ Remapping the Colored Buttons

The colored button assignment on the AV receiver's remote controller can be remapped to match that on the remote controller of the component whose remote control code you programmed to REMOTE MODE. However, you will not be able to remap the colored buttons if Zone 2/Zone 3 is selected.

1. Hold down the REMOTE MODE button to map and A (Red) simultaneously until the remote indicator lights (about 3 seconds).
   - Remapping is possible only for codes included in the categories of the Remote Control Code List such as DVD player and TV.



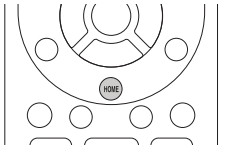
2. Within 30 seconds, press the colored buttons from left to right, in the order you want to remap.
   - For example, if the colored buttons on the remote controller of the other component are yellow, green, blue, and red from left to right, press the buttons on the AV receiver's remote controller in that order.
   - Programming is complete when the remote indicator flashes twice. The remote indicator flashes once slowly when programming the remote control code fails. Try the remapping again.
   - Pressing any other button than a colored button cancels the remap operation.



■ Resetting the REMOTE MODE Buttons

You can reset the remote control code registered in the REMOTE MODE button to its default status. This operation can be executed on a single REMOTE MODE button.

1. Press HOME for 3 or more seconds while holding down the REMOTE MODE button you want to reset.
   - The remote indicator will light.

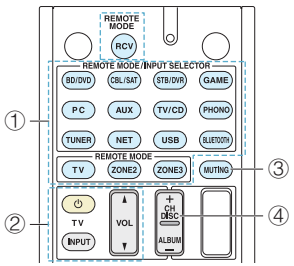


2. Within 30 seconds, press the REMOTE MODE button again.
   - Reset is complete when the remote indicator flashes twice.

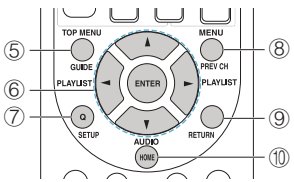
To reset all the remote controller settings, while holding down RCV, press and hold down HOME until the remote indicator lights (about 3 seconds). Press RCV again within 30 seconds. Reset is complete when the remote indicator flashes twice.

TV operation

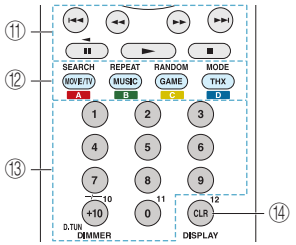
Press the REMOTE MODE button programmed with the remote control code for the relevant AV component to switch the remote controller mode to that for the AV component. Then, operate by using the corresponding buttons. Available buttons vary depending on the product category of the component. Operation may be incorrect or impossible depending on the product.



① REMOTE MODE
② ⏻, INPUT, VOL ▲/▼
③ MUTING
④ CH +/-



⑤ GUIDE
⑥ ▲/▼/◄/►, ENTER
⑦ SETUP
⑧ PREV CH
⑨ RETURN
⑩ AUDIO (∗)

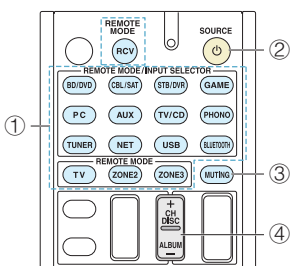


⑪ ►, ❚❚, ■, ◄◄, ►►, |◄◄, ►►| (∗)
⑫ A (Red), B (Green), C (Yellow), D (Blue)
⑬ Number 1 to 9, 0, +10
⑭ CLR, DISPLAY

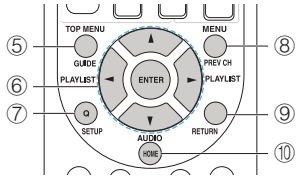
∗ Not CEC-compatible.

Blu-ray Disc player/DVD player/DVD recorder operation

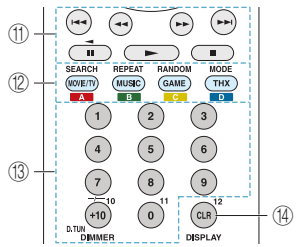
Press the REMOTE MODE button programmed with the remote control code for the relevant AV component to switch the remote controller mode to that for the AV component. Then, operate by using the corresponding buttons. Available buttons vary depending on the product category of the component. Operation may be incorrect or impossible depending on the product.



① REMOTE MODE
② ⏻SOURCE
③ MUTING
④ CH +/-, DISC +/-



⑤ TOP MENU
⑥ ▲/▼/◄/►, ENTER
⑦ SETUP
⑧ MENU
⑨ RETURN
⑩ AUDIO (∗)

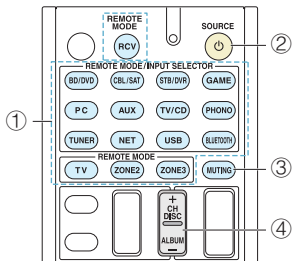


⑪ ►, ❚❚, ■, ◄◄, ►►, |◄◄, ►►|
⑫ A (Red), B (Green), C (Yellow), D (Blue)
⑬ Number 1 to 9, 0, +10 (∗)
⑭ CLR, DISPLAY

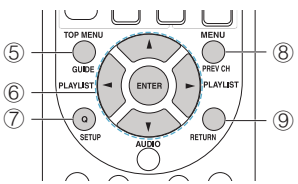
∗ Not CEC-compatible.

VCR/PVR operation

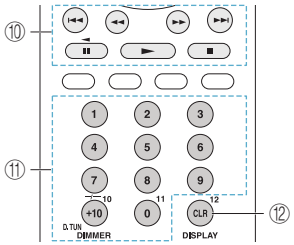
Press the REMOTE MODE button programmed with the remote control code for the relevant AV component to switch the remote controller mode to that for the AV component. Then, operate by using the corresponding buttons. Available buttons vary depending on the product category of the component. Operation may be incorrect or impossible depending on the product.



① REMOTE MODE
② ⏻SOURCE
③ MUTING
④ CH +/-



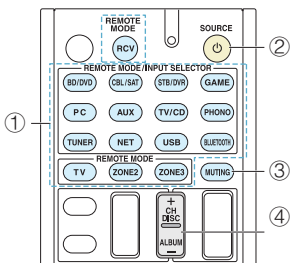
⑤ GUIDE
⑥ ▲/▼/◄/►, ENTER
⑦ SETUP
⑧ PREV CH
⑨ RETURN



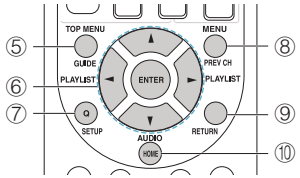
⑩ ►, ❚❚, ■, ◄◄, ►►, I◄◄, ►►I
⑪ Number 1 to 9, 0, +10
⑫ CLR, DISPLAY

Satellite receiver / Cable receiver operation

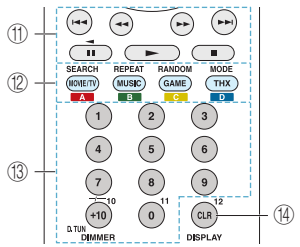
Press the REMOTE MODE button programmed with the remote control code for the relevant AV component to switch the remote controller mode to that for the AV component. Then, operate by using the corresponding buttons. Available buttons vary depending on the product category of the component. Operation may be incorrect or impossible depending on the product.



① REMOTE MODE
② ⏻SOURCE
③ MUTING
④ CH +/-



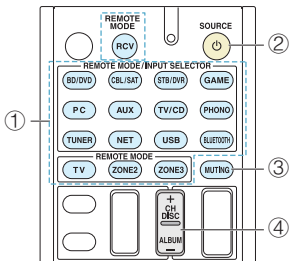
⑤ GUIDE
⑥ ▲/▼/◄/►, ENTER
⑦ SETUP
⑧ PREV CH
⑨ RETURN
⑩ AUDIO



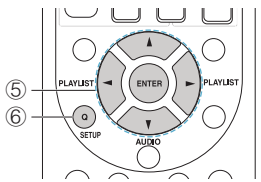
⑪ ►, ❚❚, ■, ◄◄, ►►, I◄◄, ►►I
⑫ A (Red) B (Green), C (Yellow), D (Blue)
⑬ Number 1 to 9, 0, +10
⑭ CLR, DISPLAY

CD player operation

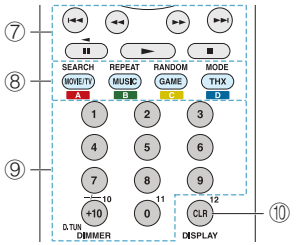
Press the REMOTE MODE button programmed with the remote control code for the relevant AV component to switch the remote controller mode to that for the AV component. Then, operate by using the corresponding buttons. Available buttons vary depending on the product category of the component. Operation may be incorrect or impossible depending on the product.



① REMOTE MODE
② ⏻SOURCE
③ MUTING
④ DISC +/-



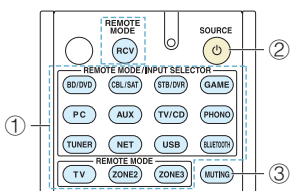
⑤ ▲/▼/◄/►, ENTER
⑥ SETUP



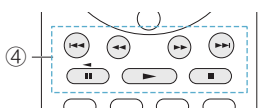
⑦ ►, ❚❚, ■, ◄◄, ►►, I◄◄, ►►I
⑧ SEARCH, REPEAT, RANDOM, MODE
⑨ Number 1 to 9, 0, +10
⑩ CLR, DISPLAY

Cassette tape deck operation

Press the REMOTE MODE button programmed with the remote control code for the relevant AV component to switch the remote controller mode to that for the AV component. Then, operate by using the corresponding buttons. Available buttons vary depending on the product category of the component. Operation may be incorrect or impossible depending on the product.



① REMOTE MODE
② ⏻SOURCE
③ MUTING



④ ► ◄ (Reverse Playback), ■, ◄◄, ►►, I◄◄, ►►I

To operate CEC-compatible components

The TV and BD/DVD buttons on the remote controller are preprogrammed with remote control codes for linked operation of some CEC(Consumer Electronics Control)-compatible TV sets and Blu-ray Disk players. By connecting to the unit via HDMI, you may operate them using the AV receiver's remote controller.

- If you cannot operate your CEC-compatible component, program one of the following remote control codes to the TV or BD/DVD button.
  TV: 11807/13100/13500 (CEC-compatible TV)
  BD/DVD: 32910/33101/33501/31612 (CEC-compatible BD/DVD player)

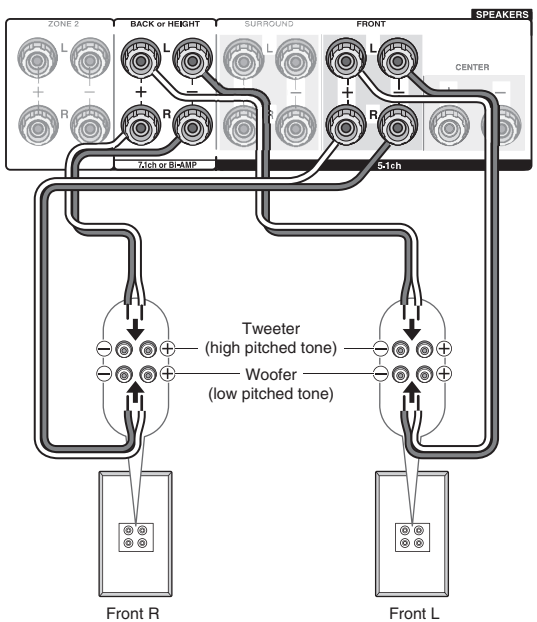
Advanced Speaker Connection

Bi-Amping

It is possible to connect speakers supporting bi-amping to improve quality of the low and high pitched ranges. Up to 5.2 ch will be played in bi-amping.

■ Connections

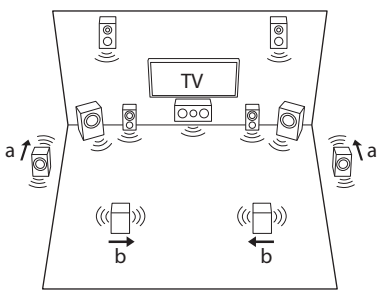
1. Connect as below using the FRONT terminals and BACK or HEIGHT terminals.



2. Turn the unit on and make the bi-amping setting.
   ① After pressing RCV, press HOME on the remote controller.
   ② With the cursors, select "Setup", and then press ENTER.
   ③ With the cursors, select the order of "2. Speaker Setup" – "Speaker Settings" – "Front Speakers Type".
   ④ Select "Bi-Amp" with the cursors and press ENTER.
   - Before bi-amping, be sure to remove the short-circuit connector that connects the tweeter (high pitched tone) terminal and the woofer (low pitched tone) terminal.
   - Use speakers supporting bi-amping only. For details, refer to the speakers' instruction manual.

Connecting Dipole Speakers

It is possible to use dipole speakers instead of surround speakers and surround back speakers. A dipole speaker is bidirectional speaker outputting the same sound in two directions, for example forward and backward.



■ Connections

An arrow for matching the phases (∗) is marked on a dipole speaker. Place the surround speakers (a) so that their arrows (↑) point to the TV and the surround back speakers (b) so that their arrows (→) point to each other.

∗ Phase: A waveform position in one cycle (0 to 360 degree) of sine wave. If the phases do not match due to mistake in speaker distance, installation angle or positive/negative of wiring, sound image and sound field may be unclear or hard of listening.

Connecting and Operating Onkyo RI Components

About RI Function

Connecting an Onkyo component with RI jack such as the separately sold RI Dock to the unit by using an RI cable and an analog audio (RCA) cable enables the following RI functions:

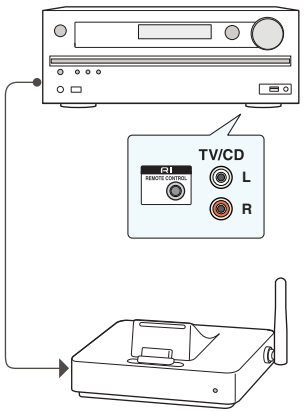
System On / Auto Power On: Starting playback on a component connected via RI when the unit is on standby mode, automatically turns on the unit to select the relevant component as its input source.

Direct Change: When playback is started on a component connected via RI, the unit selects that component as the input source.

Remote Controller Operation: Allows you to operate RI-compatible Onkyo components using the AV receiver's remote controller. Point the remote controller at remote control sensor of the unit. This operation is possible only when the RI remote control code is programmed.

- Some components may not support all RI functions.
- These functions do not work when Zone 2/Zone 3 is turned on.
- For information on the RI functions, also refer to each component's instruction manual.

RI Connection and Setting



Connect an Onkyo component with RI jack to this unit using an RI cable and an analog audio (RCA) cable. For details, refer to the instruction manual of the component with RI jack. The RI cable can be connected in any order. When there are two RI jacks, both jacks work in the same way and are interchangeable.
To connect the RI Dock or cassette tape deck via RI, you must:

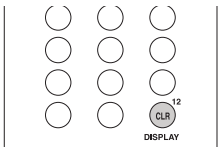
■ Rename the input selector

To make the RI functions work, you must rename the input selectors on the unit. Press TV/CD or GAME to display "TV/CD" or "GAME" on the main unit display. Then press and hold TV/CD or GAME 3 seconds or more to switch the display to "DOCK" or "TAPE".

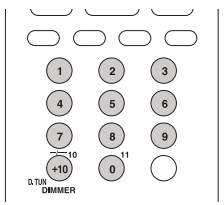
■ Program the RI remote control code

Program the remote control code to any REMOTE MODE button on the remote controller. This will allow you to operate the component by pointing the remote controller at the unit instead of the component.

1. Press DISPLAY for 3 or more seconds while holding down the REMOTE MODE button to which you want to program the remote control code.
   - The remote indicator will light.
   - The RCV, ZONE2, ZONE3 and TV buttons cannot be programmed.



2. With the number buttons, enter the following 5-digit remote control code within 30 seconds.
   RI Dock: 81993
   Cassette tape deck with RI jack: 42157
   - Programming is complete when the remote indicator flashes twice. The remote indicator flashes once slowly when programming the remote control code fails. Try again.



Change the input selector on the RI Dock to "DOCK" or "TAPE"**.** For details, refer to the RI Dock's instruction manual.

To operate Onkyo components directly or Onkyo components that are not connected via RI, use the following remote control codes:
Onkyo DVD player: 30627
Onkyo CD player: 71817
RI Dock: 82990

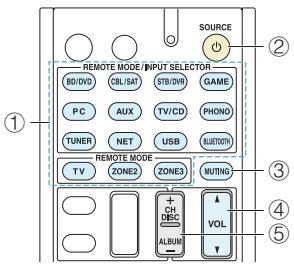
- With some models, operation may be not possible in part or not possible at all.

iPod/iPhone Operation

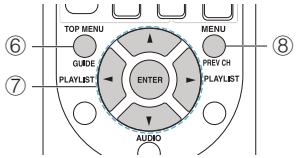
The RI Dock allows you to use the AV receiver's remote controller to operate and play music on your iPod/iPhone. Moreover, it also allows you to view videos on your iPod/iPhone on the screen of your TV, as well as perform RI operations if connected via RI. This operation is possible only when the RI remote control code is programmed.

Before Operation: Before performing any operation on your iPod/iPhone, make sure to have it updated to the latest version via iTunes. Certain buttons may not work for some iPod/iPhone models and generations, or RI Dock. For details on the operation, refer to the RI Dock's instruction manual.

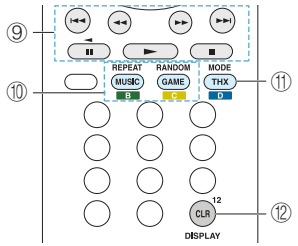
Switch the remote controller mode by pressing the REMOTE MODE button programmed with the remote control code for the iPod/iPhone, and operate by using the corresponding buttons. Point the remote controller at the unit.



① REMOTE MODE
② ⏻SOURCE
③ MUTING
④ VOL ▲/▼
⑤ ALBUM +/-



⑥ TOP MENU
⑦ ▲/▼/◄/►, ENTER, PLAYLIST◄/►
⑧ MENU



⑨ ►, ❚❚, ■, ◄◄, ►►, I◄◄, ►►I
⑩ REPEAT, RANDOM
⑪ MODE
⑫ DISPLAY

- Pressing DISPLAY turns on the backlight for a few seconds.
- MODE allows you to use the Resume function to resume playing from the song that was playing when you removed your iPod/iPhone from the DS-A2 RI Dock.

Firmware Update

About Firmware Update

There are two methods for updating the firmware: via network and via USB.
Use the one that best suits your environment.

- For the latest information on updates, visit the Onkyo website.
- Before updating, make sure that the speaker setup microphone is not connected.
- During an update, do not
  - Disconnect and reconnect any cable, USB storage device, speaker setup microphone or headphones, or perform any operation on the component such as turn off its power
  - Access to this unit from a PC or smartphone using Android application
- The update may take about 20 minutes to complete for either method: via network or via USB.
  Furthermore, existing settings are guaranteed regardless of the method used for update.

Disclaimer: The program and accompanying online documentation are furnished to you for use at your own risk.
Onkyo will not be liable and you will have no remedy for damages for any claim of any kind whatsoever concerning your use of the program or the accompanying online documentation, regardless of legal theory, and whether arising in tort or contract.
In no event will Onkyo be liable to you or any third party for any special, indirect, incidental, or consequential damages of any kind, including, but not limited to, compensation, reimbursement or damages on account of the loss of present or prospective profits, loss of data, or for any other reason whatsoever.

Updating the Firmware via Network

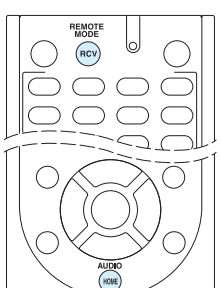
Before Start:

- Check that the unit is turned on, and the connection to the Internet is secured.
- Turn off the controller component (PC etc.) connected to the network.
- Stop any playing Internet radio, USB storage device, or server content.
- If Zone 2/Zone 3 is active, press OFF on the unit to turn it off.
- If "HDMI CEC (RIHD)" is set to "On", set it to "Off" (default value).
  - After pressing RCV, press HOME on the remote controller. Select "Setup" with the cursors and press ENTER. Then, after selecting "7. Hardware Setup" - "HDMI" and pressing ENTER, select "HDMI CEC (RIHD)" to select "Off".

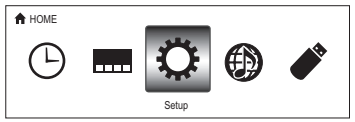
  ∗ The description may differ from the on-screen display but that will not change the way to operate or the function.

■ Update

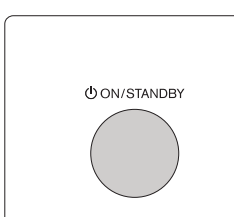
1. After pressing RCV, press HOME on the remote controller.



The HOME menu is displayed on the TV screen.



2. With the cursors, select "Setup" - "7. Hardware Setup" - "Firmware Update" - "Update via NET", and then press ENTER.
   - If "Firmware Update" is grayed out and cannot be selected, wait for a while until it starts up.
   - You will not be able to select "Update via NET" if there is nothing to update.
3. Press ENTER with "Update" selected to start update.
   - During the update, the TV screen may go black depending on the updated program. In that case, check the progress on the display of the unit. The TV screen will remain black until the update is complete and the power is turned on again.
   - "Completed!" is displayed when the update is complete.
4. Press ⏻ON/STANDBY on the main unit to turn the unit into standby mode. This is the end of the firmware update and you have now the latest firmware installed.
   - Do not use ⏻RECEIVER on the remote controller.



■ If an Error Message is Displayed

When an error occurs, "∗-∗∗ Error!" is appeared on the display of the unit. ("∗" represents an alphanumeric character.) Check the following:

Error Code

- **∗-01, ∗-10:**
  Ethernet cable not found. Connect the Ethernet cable properly.
- **∗-02, ∗-03, ∗-04, ∗-05, ∗-06, ∗-11, ∗-13, ∗-14, ∗-16, ∗-17, ∗-18, ∗-20, ∗-21:**
  Internet connection error. Check the following:
  – Whether the router is turned on
  – Whether this unit and router are connected to the network

  Try to disconnect and then connect again the power to the unit and router. This may solve the problem. If you are still unable to connect to the Internet, the DNS server or proxy server may be temporarily down. Check the service status with your ISP provider.
- **Others:**
  Disconnect then reconnect the AC power cord, from the beginning.

Updating the Firmware via USB

Before Start:

- Prepare a 64 MB or larger USB storage device.
  – Media inserted in a USB card reader may not be used for this function.
  – USB storage devices with security function are not supported.
  – USB hubs and USB devices with hub function are not supported. Do not connect these devices to the unit.
- Delete any data stored on the USB storage device.
- Turn off the controller component (PC etc.) connected to the network.
- Stop any playing Internet radio, USB storage device, or server content.
- If Zone 2/Zone 3 is active, press OFF on the unit to turn it off.
- If "HDMI CEC (RIHD)" is set to "On", set it to "Off" (default value).
  – After pressing RCV, press HOME on the remote controller. Select "Setup" with the cursors and press ENTER. Then, after selecting "7. Hardware Setup" - "HDMI" and pressing ENTER, select "HDMI CEC (RIHD)" to select "Off".

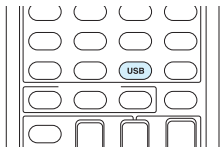
∗ Some USB storage devices may take long to load, may not be loaded correctly, or may not be correctly fed depending on the device or their content.

∗ Onkyo will not be liable whatsoever for any loss or damage of data, or storage failure arising from the use of the USB storage device with this AV receiver. Thank you for your understanding.

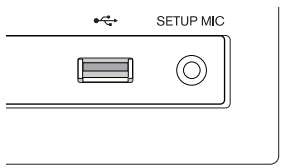
∗ The description may differ from the on-screen display but that will not change the way to operate or the function.

■ Update

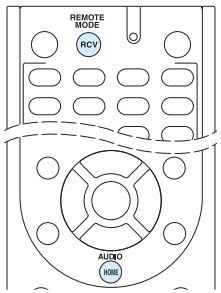
1. Connect the USB storage device to your PC.
2. Download the firmware file from the Onkyo website to your PC and unzip.
   Firmware files are named in the following way:
   ONKAVR∗∗∗∗_∗∗∗∗∗∗∗∗∗∗∗.zip
   Unzip the file on your PC. The number of unzipped files and folders varies depending on the model.
3. Copy all unzipped files and folders to the root folder of the USB storage device.
   - Make sure to copy the unzipped files.
4. Press USB on the remote controller to select "USB".



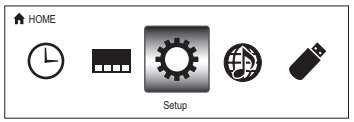
5. Connect the USB storage device to the USB port of the unit.
   - If you connect a USB hard disk drive to the USB port of the unit, we recommend that you use its AC adapter to power it.
   - If the USB storage device has been partitioned, each section will be treated as an independent device.



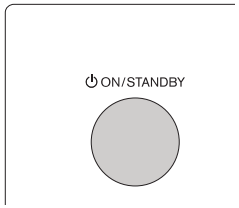
6. After pressing RCV, press HOME on the remote controller.



The HOME menu is displayed on the TV screen.



7. With the cursors, select "Setup" - "7. Hardware Setup" - "Firmware Update" - "Update via USB", and then press ENTER.
   - If "Firmware Update" is grayed out and cannot be selected, wait for a while until it starts up.
   - You will not be able to select "Update via USB" if there is nothing to update.
8. Press ENTER with "Update" selected to start update.
   - During the update, the TV screen may go black depending on the updated program. In that case, check the progress on the display of the unit. The TV screen will remain black until the update is complete and the power is turned on again.
   - During the update, do not turn off, or disconnect then reconnect the USB storage device.
   - "Completed!" is displayed when the update is complete.
9. Disconnect the USB storage device from the unit.
10. Press ⏻ON/STANDBY on the main unit to turn the unit into standby mode. This is the end of the firmware update and you have now the latest firmware installed.
    - Do not use ⏻RECEIVER on the remote controller.



■ If an Error Message is Displayed

When an error occurs, "∗-∗∗ Error!" is appeared on the display of the unit. ("∗" represents an alphanumeric character.) Check the following:

Error Code

- **∗-01, ∗-10:**
  USB storage device not found. Check whether the USB storage device or USB cable is correctly inserted to the USB port of the unit.
  Connect the USB storage device to an external power source if it has its own power supply.
- **∗-05, ∗-13, ∗-20, ∗-21:**
  The firmware file is not present in the root folder of the USB storage device, or the firmware file is for another model. Retry from the download of the firmware file.
- **Others:**
  Disconnect then reconnect the AC power cord, from the beginning.

Troubleshooting

Before starting the procedure

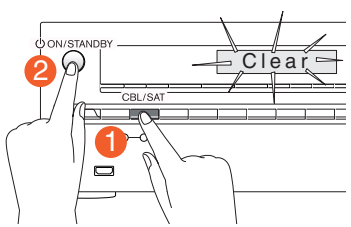
Problems may be solved by simply turning the power on/off or disconnecting/connecting the power cord, which is easier than working on the connection, setting and operating procedure. Try the simple measures on both the unit and the connected device. If the problem is that the video or audio is not output or the HDMI linked operation does not work, disconnecting/connecting the HDMI cable may solve it. When reconnecting, be careful not to wind the HDMI cable since if wound the HDMI cable may not fit well. After reconnecting, turn off and on the unit and the connected device.

Resetting the unit

Resetting the unit to the status at the time of shipment may solve the problem. If the measures above do not solve the problem, reset the unit with the following procedure. If you reset the unit status, your preferences will be reset to the defaults. Note them down before starting reset.

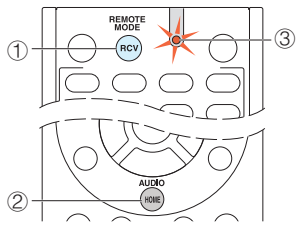
■ How to reset

1. While holding down CBL/SAT on the main unit (note that step 2 must be performed with this button pressed down)
2. Press ⏻ON/STANDBY on the unit. "Clear" is appeared on the display and the unit will enter standby mode.



■ How to reset the remote controller

1. While holding down ①RCV on the remote controller (note that step 2 must be performed with this button pressed down)
2. Press and hold down ② HOME until the ③ remote indicator lights (about 3 seconds). Within 30 seconds, press ①RCV again.



Power

■ Can not turn on the unit

- Make sure that the power cord is properly plugged into the wall outlet.
- Unplug the power cord from the wall outlet, wait 5 seconds or more, then plug it in again.

■ The unit turns off unexpectedly

- The unit will automatically enter standby mode when Auto Standby has been set and launches.

■ The unit turns off and after restoring the power, it turns off again

- The protection circuit has been activated. Remove the power cord from the wall outlet immediately. Make sure that all speaker cables and input sources are properly connected, and leave the unit with its power cord disconnected for 1 hour. After that, reconnect the power cord and turn the power on. If the unit turns off again, avoid resetting it and unplug the power cord. Then contact your Onkyo dealer.

Caution: If "CHECK SP WIRE" is appeared on the display, the speaker cables may be shorting.

WARNING: If smoke, smell or abnormal noise is produced by the unit, unplug the power cord from the wall outlet immediately and contact the dealer or Onkyo Support.

Audio

■ There is no sound, or it is very quiet

- Make sure that the proper input source is selected.
- Make sure that connecting plugs are pushed in all the way.
- Make sure that the inputs and outputs of all components are connected properly.
- Make sure that the polarity of the speaker cables is correct, and that no bare wires are in contact with the metal part of speaker terminals.
- Make sure that the input source is properly selected.
- Make sure that the speaker cables are not shorting.
- Check the volume. The volume level is adjustable between Min, 1 to 99, Max (100). It is normal that the unit volume level is set up to 40 or around.
- If the MUTING indicator on the display flashes, press MUTING on the remote controller to unmute the unit.
- While headphones are connected to the PHONES jack, no sound is output from the speakers.
- If there is no sound from a BD/DVD player connected to an HDMI IN, check the BD/DVD player's output settings, and be sure to select a supported audio format.
- Check the digital audio output setting on the connected component. On some game consoles, such as those that support DVD, the default setting is off.
- With some DVD-Video discs, you need to select an audio output format from a menu.
- If your turntable uses an MC cartridge, you must connect an MC head amp, or an MC transformer.
- Make sure that none of the connecting cables are bent, twisted, or damaged.
- Not all listening modes use all speakers.
- Specify the speaker distances and adjust the individual speaker levels.
- Make sure that the speaker setup microphone is not still connected.
- Set to "Off" if "Audio Selector" - "Fixed Mode" is set to "PCM" or "DTS".

■ Only the front speakers produce sound

- When the Stereo or Mono listening mode is selected, only the front speakers and subwoofer produce sound.
- Make sure the speakers are configured correctly.

■ **Only the center speaker produces sound**
- If you use the Dolby Surround listening mode with a mono source, such as an AM radio station or mono TV program, the sound is concentrated in the center speaker.
- Make sure the speakers are configured correctly.

■ **The surround speakers produce no sound**
- When the T-D (Theater-Dimensional), Stereo or Mono listening mode is selected, the surround speakers produce no sound.
- Depending on the source and current listening mode, not much sound may be produced by the surround speakers. Try selecting another listening mode.
- Make sure the speakers are configured correctly.

■ **The center speaker produces no sound**
- When the Stereo or Mono listening mode is selected, the center speaker produces no sound.
- Make sure the speakers are configured correctly.

■ **There is no sound from surround back speakers or height speakers.**
- Depending on the source or current listening mode, not much sound may be output from speakers. Try selecting another listening mode.
- Make sure the settings for the speakers are made correctly.

■ **The subwoofer produces no sound**
- When you play source material that contains no information in the LFE channel, the subwoofer produces no sound.
- Make sure the speakers are configured correctly.

■ **There is no sound with a certain signal format**
- When listening to Dolby Digital and/or DTS sound, digital connection is necessary.
- Check the digital input terminal setting. If the connection is different from the default, re-setting is necessary.
- Check the digital audio output setting on the connected component. On some game consoles, such as those that support DVD, the default setting is off.

■ **There is no sound with Dolby Atmos signal format**
- Make sure the surround back speakers or the height speakers are connected and configured as connected in the "Speaker Configuration".
- Make sure the input signal is the Dolby Atmos format.

■ **Can not select the Pure Audio listening mode (European, Australian and Asian models)**
- The Pure Audio listening mode can not be selected while Zone 2/Zone 3 is on.

■ **Can not select a desired listening mode**
- Depending on the connecting status of the speaker, some listening modes may not be selected. Check the details in "Using the Listening Modes" section.

■ **Can not play 5.2 ch**
- Make sure the speakers are configured correctly.
- Not all listening modes use all speakers.

■ **Can not get 6.2 ch/7.2 ch playback**
- 6.2 ch/7.2 ch playback is not possible if surround back speakers and height speakers are not connected.
- Depending on the number of connected speakers, it is not always possible to select all of the listening modes.

■ **The speaker volume cannot be set as required**
- Check to see if a maximum volume has been set.

■ **Noise can be heard**
- Using cable ties to bundle analog audio (RCA) cables with power cords, speaker cables, etc. may degrade the audio performance, so refrain from doing it.
- An analog audio (RCA) cable may be picking up interference. Try repositioning your cables.

■ **The Late Night function does not work**
- Make sure the source material is Dolby Digital, Dolby Digital Plus, or Dolby TrueHD.

■ **About DTS signals**
- When DTS program material ends and the DTS bitstream stops, the unit remains in DTS listening mode and the dts indicator remains on. This is to prevent noise when you use the pause, fast forward, or fast reverse function on your player. If you switch your player from DTS to PCM, you may not hear any sound because the unit does not switch formats immediately. In such case, you should stop your player for about 3 seconds and then resume playback.
- With some CD and LD players, you will not be able to playback DTS material properly even though your player is connected to a digital input on the unit. This is usually because the DTS bitstream has been processed (e.g., output level, sampling rate, or frequency response changed) and the unit does not recognize it as a genuine DTS signal. In such cases, you may hear noise.
- Playing DTS program material, using the pause, fast forward, or fast reverse function on your player may produce a short audible noise. This is not a malfunction.

■ **The beginning of audio received by an HDMI IN can not be heard**
- Since it takes longer to identify the format of an HDMI signal than it does for other digital audio signals, audio output may not start immediately.

Video

■ **There is no picture**
- Make sure that all video connecting plugs are pushed in all the way.
- Make sure that each video component is properly connected.
- If the TV is connected to the HDMI OUT jack of the unit, set "Monitor Out" to "MAIN" or "SUB" according to the output jack. If the playback source is connected to the video (composite) jack or component video jacks and you want to output the video to the TV via the HDMI OUT jack, set "HDMI Input" to "-----".
- If the video source is connected to a component video input, you must assign that input to an input selector, and your TV must be connected to COMPONENT VIDEO OUT terminal.
- If the video source is connected to a composite video input, your TV must be connected to the MONITOR OUT V terminal.
- If the video source is connected to an HDMI input, you must assign that input to an input selector, and your TV must be connected to the HDMI output(s).
- While the Pure Audio (European, Australian and Asian models) listening mode is selected, the analog video circuitry is turned off and only video signals input through HDMI IN can be output.
- Make sure the switching of input screens is proper at the monitor side such as a TV.

- When the image input from the composite video input terminal does not get displayed, make sure that the component video input terminal is not set to the selected input. If selected, images input from the composite video input terminal can not be output to this input switching. If only composite video input terminal connection is used, set the component video input terminal to "-----".
- Images of a component connected to the composite video input terminal can not be output by converting on the monitor of a TV or other components connected to COMPONENT VIDEO OUT terminal.
- If the input selector to which the input from the TV connected to the HDMI OUT SUB jack is connected is changed on this unit when "Monitor Out" is set to "MAIN+SUB", or "MAIN" and when outputting to Zone 2, the video from the TV connected to HDMI OUT MAIN stops displaying.
- "Resolution" is effective only for the HDMI OUT MAIN jack if "Monitor Out" is set to "MAIN+SUB".

■ There is no picture from a source connected to an HDMI IN

- Reliable operation with an HDMI-to-DVI adapter is not guaranteed. In addition, video signals from a PC are not supported.
- Check if "Resolution Error" is displayed on the main unit display when video input via HDMI IN jack is not displayed. In this case, the TV does not support the resolution of the video input from the player. Change the setting on the player.

■ The on-screen menus do not appear

- On your TV, make sure that the video input to which this unit is connected is selected.
- Set "On Screen Display" to "On" in "OSD Setup".

Tuner

■ Reception is noisy, FM stereo reception is noisy, or the FM STEREO indicator does not light

- Re-check the antenna connection.
- Relocate your antenna.
- Move the unit away from your TV or PC.
- Passing cars and airplanes can cause interference.
- Concrete walls weaken radio signals.
- Listen to the station in mono.
- When listening to an AM station, operating the remote controller may cause noise.
- If nothing improves the reception, install an outdoor antenna.

Remote Controller

■ The remote controller does not work

- Before operating this unit using remote controller, be sure to press RCV.
- Make sure that the batteries are installed with the correct polarity.
- Install new batteries. Do not mix different types of batteries, or old and new batteries.
- Make sure that the remote controller is not too far away from the unit, and that there is no obstruction between the remote controller and the remote control sensor of the unit.
- Make sure that the unit is not subjected to direct sunshine or inverter-type fluorescent lights. Relocate if necessary.
- If the unit is installed in a rack or cabinet with colored-glass doors or if the doors are closed, the remote controller may not work reliably.
- Make sure you have selected the correct remote controller mode.
- When using the remote controller to control other manufacturers' AV components, some buttons may not work as expected.
- Make sure you have entered the correct remote control code.
- Make sure to set the same ID on both the unit and remote controller.

■ Operating other Onkyo component by using a RI remote control code is not available

- Make sure that the Onkyo component is properly connected with RI cable. When RI cable is used for connection, make sure to connect analog audio (RCA) cable as well. (Connecting only an RI cable will not be enough.)
- Make sure you have selected the correct remote controller mode.
- Make sure that the input display is correctly set.
- Input the RI remote control code again.
- When the RI remote control code is input, point the remote controller at remote control sensor of the unit.

■ Can not operate Onkyo components (ones without RI connection) and components of other makers

- Make sure that the connection with other components is correct.
- Input a correct remote control code again. If there are several codes, try each code.
- Make sure that the remote controller mode is correctly selected.
- Operate the remote controller by setting toward the light receiving section of each component.
- Some components may not start the operation.

RI Dock for iPod/iPhone

■ There is no sound

- Make sure your iPod/iPhone is actually playing.
- Make sure your iPod/iPhone is properly inserted in the Dock.
- Make sure the unit is turned on, the correct input source is selected, and the volume is turned up.
- Make sure the plugs are pushed in all the way.
- Try resetting your iPod/iPhone.

■ There is no video

- Make sure that your iPod/iPhone model's TV OUT setting is set to On.
- Make sure the correct input is selected on your TV or the unit.
- Some versions of the iPod/iPhone do not output video.

■ The AV receiver's remote controller does not control my iPod/iPhone

- Make sure your iPod/iPhone is properly inserted in the Dock. If your iPod/iPhone is in a case, it may not connect properly to the Dock. Always remove your iPod/iPhone from the case before inserting it into the Dock.
- The iPod/iPhone can not be operated while it is displaying the Apple logo.
- Make sure you have selected the correct remote controller mode.

- When you use the AV receiver's remote controller, point it toward this unit.
- Before operating with the remote controller, you may need to play on your iPod/iPhone to make the input selector be recognized.
- Try resetting your iPod/iPhone.
- Depending on your iPod/iPhone model and generation, some buttons may not work as expected.

■ The unit unexpectedly selects my iPod/iPhone as the input source

- Always pause iPod/iPhone playback before selecting a different input source. If playback is not paused, the Direct Change function may select your iPod/iPhone as the input source by mistake during the transition between tracks.

■ iPod/iPhone does not work properly

- Try reconnecting your iPod/iPhone.

Multi-zone Function

■ There is no sound

- With multi-zone function, sound is output only when the signal input source is an external component connected to the analog audio input jacks of the unit, "NET", "USB", "BLUETOOTH", "AM" or "FM". Multi-zone playback is not possible if the player and the unit are connected via HDMI cable or digital cable. Connect the RCA audio output jacks of the player and the analog audio input jacks of the unit with analog audio (RCA) cable. Also analog audio output setting may be necessary on the player.

Wi-Fi (Wireless LAN) Network

■ Cannot access to Wi-Fi (Wireless LAN) network or sound playback is interrupted and communication does not work

- Try plugging/unplugging the power supply of wireless LAN router and the unit, check the wireless LAN router power-on status, and try reboot of the wireless LAN router.
- The setting of SSID and encryption (WEP, etc.) is not correct. Make sure the network settings of the unit is properly set.
- Connection to an SSID that includes multi-byte characters is not supported. Name the SSID of the wireless LAN router using single-byte alphanumeric characters only and try again.
- Can not receive radio wave due to a bad connection. Shorten the distance from wireless LAN access point or remove obstacles for a good visibility, and try again. Place the unit away from microwave ovens or other access points. 2.4 GHz band for wireless LAN may not be enough. Connect ETHERNET terminal of the unit and the router via an Ethernet cable after selecting "7. Hardware Setup" - "Network" and changing "Wi-Fi" to "Off (Wired)".
- Place the unit away from the components emitting electromagnetic waves on the 2.4 GHz band (microwave ovens, game consoles, etc.). If this does not solve the problem, stop using other components which emit electromagnetic waves.
- When other wireless LAN devices are used near the unit, several issues such as interrupted playback and communication may occur. You can avoid these issues by changing the channel of your wireless LAN router. For instructions on changing channels, see the instruction manual provided with your wireless LAN router.
- If there is a metallic object near the unit, wireless LAN connection may not be possible as the metal can effect on the radio wave.
- If there is more than one access point in the network, separate each access point.
- It is recommended to place the Wi-Fi router (access point) and the unit in the same room.

■ The connection does not complete even when the automatic setting button is pressed on the wireless LAN router

- The wireless LAN router setting may be switched to Manual. Return the setting to Auto.
- Try the manual set-up. The connection may succeed.

■ On the list of SSID on the TV menu screen, there is no corresponding SSID

- When the wireless LAN router setting is at stealth mode (mode to hide the SSID key) or when ANY connection is off, the SSID is not displayed. Change the setting and try again.

Bluetooth

■ Music playback is unavailable on the unit even after successful Bluetooth connection

- Depending on the characteristics or specifications of your Bluetooth-enabled device, playback on the unit is not guaranteed.
- When the audio volume of your Bluetooth-enabled device is set low, the playback of audio may be unavailable. Volume up the Bluetooth-enabled device.
- Depending on the Bluetooth-enabled device, Send/Receive selector switch may be provided. Select Send mode.
- Even when a music file is playing on the Bluetooth-enabled device, the sound can not be played if the connection is not established with the unit. Make sure that the unit is connected (this unit is selected as the sound output destination).

■ Sound is interrupted

- Problem may be occurring at the Bluetooth-enabled device. Check the information on a webpage.

■ The audio quality is poor after connection with a Bluetooth-enabled device

- The Bluetooth reception is poor. Move the Bluetooth-enabled device closer to the unit or remove any obstacle between the Bluetooth-enabled device and this unit.

■ Can not connect with this unit

- Try plugging/unplugging the power of the unit and try turning on/off the Bluetooth-enabled device. Re-startup of the Bluetooth-enabled device may be effective.
- The Bluetooth-enabled device does not support the profiles required for this unit.
- The Bluetooth function of the Bluetooth-enabled device is not enabled. Refer to the user manual of the Bluetooth-enabled device for how to enable the function.
- Near components such as microwave oven or cordless phone, which use the radio wave in the 2.4 GHz range, a radio wave interference may occur, which disables the use of this unit.

■ Bluetooth connection can not be built

- When building a Bluetooth connection between this unit and your Bluetooth-enabled device for the first time, if the connection fails, select "7. Hardware Setup" - "

Bluetooth", execute "Clear" in "Pairing Information", turn off and then on again your Bluetooth-enabled device to clear the device name, and build the connection again.
- If there is a metallic object near the unit, Bluetooth connection may not be possible as the metal can effect on the radio wave.
- If the wireless LAN and Bluetooth connections are used at the same time, try to connect the ETHERNET port and router with the Ethernet cable after selecting "7. Hardware Setup" - "Network" and changing "Wi-Fi" to "Off (Wired)" for a better connection.

■ The Auto Reconnect function does not work
- This function may not work depending on your Bluetooth-enabled device.
  In this case, play on your Bluetooth-enabled device after pairing with this unit.

NET/USB Function

■ Can not access the network server
- When NET is blinking, the AV receiver is not properly connected to the home network.
- Make sure your network server has been started up.
- Make sure your network server is properly connected to the home network.
- Make sure your network server is correctly set.
- Make sure that the router LAN side port is properly connected to the AV receiver.
- Make sure that the correct IP address is allocated in "7. Hardware Setup" - "Network".

■ Playback stops while listening to music files on the network server
- Make sure the network server is compatible with this unit.
- When the PC is serving as the network server, try quitting any application software other than the server software (Windows Media® Player 12 etc.).
- If the PC is downloading or copying large files, the playback may be interrupted.

■ Can not access the Internet radio
- Certain network service or contents available through the unit may not be accessible in case the service provider terminates its service.
- If a specific radio station is unavailable for listening, make sure the registered URL is correct, or whether the format distributed from the radio station is supported by the AV receiver.
- When NET is blinking, the AV receiver is not properly connected to the home network.
- Make sure that your modem and router are properly connected, and make sure they are both turned on.
- Make sure that connecting to Internet from other components is possible. If connecting is not possible, turn off all components connected to the network, wait for a while, and then turn on the components again.
- Make sure that the router LAN side port is properly connected to the AV receiver.
- Make sure that the correct IP address is allocated in "7. Hardware Setup" - "Network".
- Depending on ISP, setting the proxy server is necessary.
- Make sure that the used router and/or modem is supported by your ISP.

■ Can not connect to the AV receiver from a Web browser
- Make sure that the IP address of the AV receiver is correctly input to the Internet browser.
- When DHCP is used for allocating the IP address, the IP address of this AV receiver may have been changed.
- Make sure that both AV receiver and PC are properly connected to the network.

■ USB storage device is not displayed
- Make sure that USB storage device and USB cable are securely plugged to the USB port of this AV receiver.
- Remove the USB storage device from the AV receiver once, and then try re-connecting.
- Performance of the hard disk that receives power from the USB port of the unit is not guaranteed.
- Depending on the type of format, the playback may not be performed normally. Check the type of the file formats that is supported.
- USB storage device with security functions may not be played.

Others

■ Power consumption in standby mode
- In the following cases, the power consumption in standby mode may reach up to a maximum of 5 W:
  – When "Network Standby" in "7. Hardware Setup" - "Network" is set to "On".
  – When "HDMI CEC (RIHD)" is set to "On". (Depending on the TV status, the AV receiver will enter normal standby mode.)
  – The "HDMI Through" setting is set to other than "Off".
  – When "Wakeup via Bluetooth" in "7. Hardware Setup" - "Bluetooth" is set to "On".
- The power consumption in standby mode may be larger than the value above while the MHL (Mobile High-definition Link) enabled mobile device connected to the AUX INPUT HDMI/MHL jack is being charged.

■ The sound changes when I connect my headphones
- When a listening mode other than Direct, Pure Audio (European, Australian and Asian models), or Mono is selected, connecting a headphone automatically selects Stereo.

■ The display does not work
- The display is turned off when the Pure Audio (European, Australian and Asian models) listening mode is selected.

■ How do I change the language of a multiplex source
- Select "Main" or "Sub" for "Multiplex Input Channel" in "3. Audio Adjust" - "Multiplex/Mono".

■ The RI functions do not work
- To use RI, you must make an RI connection and an analog audio (RCA) connection between the component and AV receiver, even if they are connected digitally.
- While Zone 2/Zone 3 is selected, the RI functions do not work.

■ The functions System On/Auto Power On and Direct Change do not work for components connected via RI
- These functions do not work when Zone 2//Zone 3 is turned on.

■ **When performing Automatic Speaker Setup, the measurement fails and the message "Ambient noise is too high." is displayed.**

- This can be caused by a malfunction in your speaker unit. Check if the unit produces normal sounds.

■ **The display is dark**

- Make sure that Dimmer function is not working. Press DIMMER button and change the brightness level of the display.

■ **The following settings can be made for the composite video inputs**

- While holding down the input selector button to configure, press HOME once at a time until "Video ATT:On" is appeared on the display. To resume the setup, repeat the above described step until "Video ATT:Off" is appeared on the display.
  This setting is possible for input selectors assigned with one of the video inputs "VIDEO 1" to "VIDEO 3" in "1. Input/Output Assign" - "Composite Video Input". If you have a game console connected to the composite video input, and the picture is not very clear, you can attenuate the gain.
  Video ATT:Off: (default).
  Video ATT:On: (Gain is reduced by 2dB.)

■ **If the picture on your TV/monitor connected to the HDMI output(s) is unstable**

- Try turning the DeepColor function off.
  To turn off the DeepColor function, press STB/DVR and ⏻ON/STANDBY on the AV receiver simultaneously. While holding down STB/DVR, press ⏻ON/STANDBY repeatedly until "Deep Color:Off" is appeared on the display. To reactivate the DeepColor function, repeat the above described step until "Deep Color:On" is appeared on the display.

The AV receiver contains a microPC for signal processing and control functions. In very rare situations, severe interference, noise from an external source, or static electricity may cause it to lockup. In the unlikely event that this happens, unplug the power cord from the wall outlet, wait at least 5 seconds, and then plug it back in.

Onkyo is not responsible for damages (such as CD rental fees) due to unsuccessful recordings caused by the unit's malfunction.
Before you record important data, make sure that the material will be recorded correctly.

Before disconnecting the power cord from the wall outlet, set the AV receiver to standby.

Reference Information

Compatible Components

The AV receiver is compatible with the following components (as of January 2014).

TV (Random order):
- Toshiba TV sets
- Sharp TV sets

Players/Recorders (Random order):
- Onkyo and Integra RIHD-compatible players
- Toshiba players and recorders
- Sharp players and recorders (only when used together with Sharp TV sets)

Models other than those mentioned above may have some interoperability if compatible with CEC, which is part of the HDMI Standard, but operation can not be guaranteed.

Note: For RI functions to work properly, do not connect more RIHD-compatible components than the quantities specified below, to the HDMI jack. RI functions are not guaranteed when more RIHD-compatible components than the below mentioned quantities are connected. Furthermore, do not connect the AV receiver to another AV receiver/AV amplifier via HDMI.
- Blu-ray Disc/DVD players: up to 3.
- Blu-ray Disc/DVD recorders: up to 3.
- Cable TV tuner, terrestrial digital tuner, and satellite broadcasting tuner: up to 4 units.

Checking whether the HDMI Linked Operation Settings Are Enabled

1. Turn on the power of all connected components.
2. Turn off the power of the TV, and confirm that the power of the connected components is turned off automatically with the link operation.
3. Turn on the power of the Blu-ray Disc/DVD player/recorder.
4. Start playback on the Blu-ray Disc/DVD player/recorder, and verify the following:
   - The AV receiver automatically turns on, and selects the input to which the Blu-ray Disc/DVD player/recorder is connected.
   - The TV automatically turns on, and selects the input to which the AV receiver is connected.
5. Following the operating instructions of the TV, select "Use the TV speakers" from the menu screen of the TV, and confirm that the audio is output from the speakers of the TV, and not from the speakers connected to the AV receiver.
6. Select "Use the speakers connected from the AV receiver" from the menu screen of the TV, and confirm that the audio is output from the speakers connected to the AV receiver, and not from the TV speakers.

Note:
- Even if you set to output audio on the TV speakers, audio will be output from the speakers connected to the AV receiver when you adjust the volume or switch the input on the AV receiver. To output audio from the TV speakers, redo the corresponding operations on the TV.
- In case of an RIHD connection with RI and RI audio control compatible components, do not connect the RI cable at the same time.
- On the TV, when you select anything other than the HDMI jack to which the AV receiver is connected, the input on the AV receiver will be switched to "TV/CD".
- The AV receiver will automatically power on in conjunction when it determines it to be necessary. Even if the AV receiver is connected to an RIHD compatible TV or player/recorder, it will not power on if it is not necessary. It may not power on in conjunction when the TV is set to output audio from the TV.
- Linked system functions with the AV receiver may not work depending on the component model connected. In such cases, operate the AV receiver directly.
- When the player/recorder cannot be operated with the remote controller of the AV receiver, the corresponding component may not be programmed to support the remote controller operation of CEC. Program the remote control code of the component maker to the remote controller for using.

About HDMI

HDMI (High Definition Multimedia Interface) is a digital interface standard for connecting TVs, projectors, Blu-ray Disc/DVD players, set-top boxes, and other video components. Until now, several separate video and audio cables have been required to connect AV components. With HDMI, a single cable can carry control signals, digital video, and digital audio (2-channel PCM, multichannel digital audio, and multichannel PCM).
The HDMI video stream (i.e., video signal) is compatible with DVI (Digital Visual Interface) (∗1), so TVs and displays with a DVI input can be connected by using an HDMI-to-DVI adapter cable. (This may not work with some TVs and displays, resulting in no picture.)
This unit supports HDCP (High-bandwidth Digital Content Protection) (∗2), so it can display picture only on HDCP-compatible components.
The HDMI on this unit supports the following functions: Audio Return Channel, 3D, x.v.Color, DeepColor, Lip Sync, 4K (Upscaling and Passthrough).

Supported Audio Formats of this Unit:
- 2-channel linear PCM (32 - 192 kHz, 16/20/24 bit)
- Multichannel linear PCM (up to 7.1 ch, 32 - 192 kHz, 16/20/24 bit)
- Bitstream (Dolby Atmos, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS, DTS-HD High Resolution Audio, DTS-HD Master Audio)
- DSD

Your Blu-ray Disc/DVD player must also support HDMI output of the above audio formats.

About Copyright Protection:
The unit supports Revision 1.4 and Revision 2.2 (HDMI OUT MAIN and HDMI IN3 only) of the HDCP (High-bandwidth Digital Content Protection) (∗2), a copy-protection system for digital video signals. Other devices connected to the unit must also support HDCP.

∗1 DVI (Digital Visual Interface): The digital display interface standard set by the DDWG (∗3) in 1999.
∗2 HDCP (High-bandwidth Digital Content Protection): The video encryption technology developed by Intel for HDMI/DVI. It is designed to protect video content and requires a HDCP-compatible HDMI/DVI receiver to display the encrypted video.
∗3 DDWG (Digital Display Working Group): Lead by Intel, Compaq, Fujitsu, Hewlett-Packard, IBM, NEC, and Silicon Image, this open industry group's objective is to address the industry's requirements for a digital connectivity specification for high-performance PC and digital displays.

Note:
- There are some content that can be played only with HDCP Rev. 2.2 compatible devices. To play such content, connect an HDCP Rev.2.2 compatible TV or player to the HDMI OUT MAIN jack or HDMI IN3 jack of the unit.
- The HDMI video stream (i.e., video signal) is compatible with DVI (Digital Visual Interface), so TVs and displays with a DVI input can be connected by using an HDMI-to-DVI adapter cable. (Note that DVI connections only carry video, so you will need to make a separate connection for audio.) However, reliable operation with such an adapter is not guaranteed. In addition, video signals from a PC are not supported.
- The HDMI audio signal (sampling rate, bit length, etc.) may be restricted by the connected source component. If the picture is poor or there is no sound from a component connected via HDMI, check its setup. Refer to the connected component's instruction manual for details.

Supported Video Resolution of HDMI OUT MAIN/ SUB Jacks

See below the video signal types and resolutions that the unit can output when it receives the input signals of the following types and resolutions. The supported resolutions are shown as "Input: Output".

(North American and Taiwanese models)

■ **HDMI: HDMI**
4K: 4K (∗1/∗2)
1080p/24: 4K, 1080p/24 (∗1), 2560 × 1080p
2560 × 1080p: 4K (∗3), 2560 × 1080p (∗1)
1680 × 720p: 4K (∗3), 1080p/24, 2560 × 1080p, 1680 × 720p (∗1), 1080p
1080p: 4K (∗4), 2560 × 1080p, 1080p (∗1)
1080i: 4K (∗4), 2560 × 1080p, 1680 × 720p, 1080p, 1080i (∗1), 720p
720p: 4K (∗4), 1080p/24, 2560 × 1080p, 1680 × 720p, 1080p, 1080i, 720p (∗1)
480p: 4K (∗4), 2560 × 1080p, 1680 × 720p,1080p, 1080i, 720p, 480p (∗1)
480i: 4K (∗4), 2560 × 1080p, 1680 × 720p, 1080p,1080i, 720p, 480p, 480i (∗1)

■ **HDMI: Component**
Can not be output.

■ **HDMI: Composite**
Can not be output.

■ **Component: HDMI**
480i: 4K (∗4), 2560 × 1080p, 1680 × 720p, 1080p,1080i, 720p, 480p, 480i (∗1)

■ **Component: Component**
1080i: 1080i
720p: 720p
480p: 480p
480i: 480i

■ **Composite: HDMI**
480i: 4K (∗4), 2560 × 1080p, 1680 × 720p, 1080p,1080i, 720p, 480p, 480i (∗1)

■ **Composite: Composite**
480i: 480i

∗1 Supported resolutions for HDMI OUT SUB.
∗2 Supported resolution: [3840 × 2160 24/30/60 Hz] [4096 × 2160 24/30/60 Hz]
∗3 Supported resolution: [3840 × 2160 24/30 Hz]
∗4 Supported resolution: [3840 × 2160 24/30 Hz] [4096 × 2160 24/30 Hz]

(European, Australian and Asian models)

■ **HDMI: HDMI**
4K: 4K (∗1/∗2)
1080p/24: 4K, 1080p/24 (∗1), 2560 × 1080p
2560 × 1080p: 4K (∗3), 2560 × 1080p (∗1)
1680 × 720p: 4K (∗3), 1080p/24, 2560 × 1080p, 1680 × 720p (∗1), 1080p
1080p: 4K (∗4), 2560 × 1080p, 1080p (∗1)
1080i: 4K (∗4), 2560 × 1080p, 1680 × 720p, 1080p, 1080i (∗1), 720p
720p: 4K (∗4), 1080p/24, 2560 × 1080p, 1680 ×720p, 1080p, 1080i, 720p (∗1)
480p/576p: 4K (∗4), 2560 × 1080p, 1680 × 720p,1080p, 1080i, 720p, 480p/576p (∗1)
480i/576i: 4K (∗4), 2560 × 1080p, 1680 × 720p, 1080p,1080i, 720p, 480p/576p, 480i/576i (∗1)

■ **HDMI: Component**
Can not be output.

■ **HDMI: Composite**
Can not be output.

■ **Component: HDMI**
480i/576i: 4K (∗4), 2560 × 1080p, 1680 × 720p, 1080p,1080i, 720p, 480p/576p, 480i/576i (∗1)

■ **Component: Component**
1080p: 1080p
1080i: 1080i
720p: 720p
480p/576p: 480p/576p
480i/576i: 480i/576i

■ **Composite: HDMI**
480i: 4K (∗4), 2560 × 1080p, 1680 × 720p, 1080p,1080i, 720p, 480p/576p, 480i/576i (∗1)

■ **Composite: Composite**
480i/576i: 480i/576i

∗1 Supported resolutions for HDMI OUT SUB.
∗2 Supported resolution: [3840 × 2160 24/25/30/50/60 Hz] [4096 × 2160 24/25/30/50/60 Hz]
∗3 Supported resolution: [3840 × 2160 24/25/30 Hz]
∗4 Supported resolution: [3840 × 2160 24/25/30 Hz] [4096 × 2160 24/25/30 Hz]

Home network (LAN)

The connection of several components via cables enabling the mutual communication is called a network.
At households, many families create (generally, the term "build" is used) a network to connect PC and gaming machines to the Internet and to exchange data between PC.
The network established in a relatively narrow area such as one household is called a LAN (Local Area Network).
In this manual, a term "home network" (network for a family) is used instead of "LAN," so this LAN becomes more familiar.
By connecting this unit with the network server such as a PC, playing music files in the network server (in the PC) is possible. Moreover, by connecting to the Internet, listening to the Internet radio is also possible.
This unit, PC, and Internet are not directly connected.
When connecting with a PC and/or Internet, several components (network components) are necessary.

Components necessary for establishing a home network (LAN)

Components necessary for the home network (LAN) for using the NET function of this unit are as follows.

■ Router

A router is a device that controls information (data) flow between the unit, PC, and the Internet.
As a network term, the flow of information (data) is called "traffic". The router has a role to control the information flow as the traffic control, between connected components.

- A router with a built-in 100Base-TX switch is recommended.
  In addition, if your router has the DHCP function, facilitating the network setting becomes possible.
- Some routers have a built-in modem, and some Internet Service Providers (ISP) require you to use specific routers.

Please consult your ISP or PC dealer if you are unsure.

■ CAT5 Ethernet cable

The Ethernet cable is a cable that actually connects components that comprise the network. There are straight type and cross type Ethernet cables.

- Use a shielded CAT5 Ethernet cable (straight-type) to connect the unit to your home network.

Consult your cable store for details of Ethernet cable.

■ Network server

(When PC etc./network server is used)
Component that stores music files and provides those files at the time of playback.

- Requirements for use with this unit depend on the component that is used as a network server.
- Conditions for pleasant playback of music files on the unit depend on the using network server (PC performance). See instruction manuals of using components.

■ Modem (when Internet radio is used)

Device that connects home network (LAN) and Internet
There are many kinds of modems depending on the forms of Internet connection.
In addition, when connecting to the Internet, it is required to conclude an agreement with a company that provides Internet connection service, called ISP (Internet Service Provider).
Use a modem that is recommended by your ISP company for the Internet connection.
There are some devices that have both router and modem functions.
Within above network components, prepare a router, Ethernet cable, and network server when the NET function "network server" is used.
For enjoying the NET function "Internet radio," it is necessary to use the router, Ethernet cable, and modem (and agreement with ISP).

Server Requirements

■ Server playback

This unit can play digital music files stored on a PC or media server and supports the following technologies:

- Windows Media® Player 11
- Windows Media® Player 12
- DLNA-certified media server

The network server must be connected to the same network as this unit.
Up to 20,000 folders can be displayed, and folders may be nested up to 16 levels deep.

Note: Depending on the media server, the unit may not recognize it, or may not be able to play its music files.

■ Remote playback

Remote playback is the function that enables this unit to play music files saved in different components by operating the DLNA-compliant controller component and PC in the home network.

- Windows Media® Player 12
- DLNA-certified (within DLNA Interoperability Guidelines version 1.5) media server or controller component.
  ∗ The setting varies depending on the media server or controller components. Refer to your components' instruction manual for details.

If the operating system of your personal PC is Windows® 8/ Windows® 7, Windows Media® Player 12 is already installed. For more information, see the Microsoft web site.

USB Storage Device Requirements

- USB mass storage device class (but not always guaranteed).
- FAT16 or FAT32 file system format.
- If the USB storage device has been partitioned, each section will be treated as an independent device.
- Up to 20,000 folders can be displayed, and folders may be nested up to 16 levels deep.
- USB hubs and USB storage devices with hub functions are not supported. Do not connect these devices to the unit.

Note:
- If the media you connect is not supported, the message "No Storage" will be displayed.
- Sound files that are protected by copyright can not be played.
- When the USB audio player and this unit are connected, the audio player screen and the screen of the unit may be different. In addition, control functions of the audio player (classifying and sorting music files and adding information, etc.) are not available on this unit.
- Do not connect a PC to the USB port of the unit. Inputting sound to the USB port of the unit from a PC is not possible.
- Media inserted to the USB card reader may not be available in this function.
- Some USB storage devices and its contents may require some time to be read.
- Depending on the USB storage device, proper reading of the contents and proper supply of the power supply may not be possible.
- Onkyo accepts no responsibility whatsoever for the loss or damage to data stored on a USB storage device when that device is used with this unit. We recommend that you back up your important music files beforehand.
- Performance of the hard disk that receive power from the USB port of the unit is not guaranteed.
- If you connect a USB hard disk drive to the USB port of the unit, we recommend that you use its AC adapter to power it.
- When an audio player that are operated with batteries is used, make sure that the batteries have enough remaining power.
- USB storage devices with security functions can not be played.

Supported Audio Formats

- For server playback and playback from a USB storage device, this unit supports the following music file formats.
- Music files of the following formats that can be played depend on the network server. For example, when using Windows Media® Player 12, not all music files in the PC can be played. The music files that can be played are the ones registered to the Windows Media® Player 12 library.
- Variable bit-rate (VBR) files are supported. However, playback times may not be displayed correctly.
- This unit supports the gapless playback of the USB storage device in the following conditions.
  When WAV, FLAC and Apple Lossless files are continuously played back with the same format, sampling frequency, channels and quantization bit rate.
- Remote playback does not support the gapless playback.

Note:
- With remote playback, this unit does not support the following music file formats:
  – FLAC, Ogg Vorbis, DSD and Dolby TrueHD.

■ MP3 (.mp3 or .MP3)
- Supported formats: MPEG-1/MPEG-2 Audio Layer 3
- Supported sampling rates: 8 kHz, 11.025 kHz, 12 kHz, 16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz
- Supported bitrates: Between 8 kbps and 320 kbps and VBR.

■ WMA (.wma or .WMA)
- Supported sampling rates: 8 kHz, 11.025 kHz, 16 kHz, 22.05 kHz, 32 kHz, 44.1 kHz, 48 kHz
- Supported bitrates: Between 5 kbps and 320 kbps and VBR.
- WMA Pro/Voice formats are not supported.

■ WMA Lossless (.wma or .WMA)
- Supported sampling rates: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz
- Quantization bit: 16 bit, 24 bit

■ WAV (.wav or .WAV)
WAV files contain uncompressed PCM digital audio.
- Supported sampling rates: 8 kHz, 11.025 kHz, 12 kHz, 16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz, 64 kHz, 88.2 kHz, 96 kHz, 176.4 kHz and 192 kHz
- Quantization bit: 8 bit, 16 bit, 24 bit
  ∗ For playback from a USB storage device, sampling rates of 176.4 kHz and 192 kHz are not supported.

■ AAC (.aac/.m4a/.mp4/.3gp/.3g2/.AAC/.M4A/.MP4/.3GP or .3G2)
- Supported formats: MPEG-2/MPEG-4 Audio
- Supported sampling rates: 8 kHz, 11.025 kHz, 12 kHz, 16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz, 64 kHz, 88.2 kHz, 96 kHz
- Supported bitrates: Between 8 kbps and 320 kbps. Incompatible files can not be played.

■ FLAC (.flac or .FLAC)
FLAC is a file format for lossless audio data compression.
- Supported sampling rates: 8 kHz, 11.025 kHz, 12 kHz, 16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz, 64 kHz, 88.2 kHz, 96 kHz, 176.4 kHz and 192 kHz
- Quantization bit: 8 bit, 16 bit, 24 bit
  ∗ For playback from a USB storage device, sampling rates of 176.4 kHz and 192 kHz are not supported.

■ Ogg Vorbis (.ogg or .OGG)
- Supported sampling rates: 8 kHz, 11.025 kHz, 16 kHz, 22.05 kHz, 32 kHz, 44.1 kHz, 48 kHz
- Supported bitrates: Between 32 kbps and 500 kbps and VBR.
- Incompatible files can not be played.

■ LPCM (Linear PCM)
- Supported sampling rates: 44.1 kHz, 48 kHz
- Quantization bit: 16 bit
  ∗ Only for playback via DLNA.

■ Apple Lossless (.m4a/.mp4/.M4A/.MP4)
- Supported sampling rates: 8 kHz, 11.025 kHz, 12 kHz, 16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz, 64 kHz, 88.2 kHz, 96 kHz
- Quantization bit: 16 bit, 24 bit

■ DSD (.dsf or .DSF)
- Supported sampling rates: 2.8224 MHz, 5.6448 MHz
  ∗ For playback from a USB storage device, sampling rates of 5.6448 MHz is not supported.

■ Dolby TrueHD (.vr/.mlp/.VR/.MLP)
- Supported sampling rates: 48 kHz, 64 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
  ∗ For playback from a USB storage device, only sampling rates of 48 kHz is supported.
  ∗ Playback via DLNA is not supported.

Radio Wave Caution

The AV receiver uses a 2.4 GHz radio wave frequency, which is a band used by other wireless systems as 1 and 2 described below.

1. Devices which use a 2.4 GHz radio wave frequency
   - Cordless phones
   - Cordless facsimiles

- Microwave ovens
- Wireless LAN devices (IEEE802.11b/g/n)
- Wireless AV equipment
- Wireless controllers for game systems
- Microwave oven-based health aids
- Video transmitter
- Specific type of external monitor and LCD display

2. Less common devices which use a 2.4 GHz radio wave frequency
   - Anti-theft systems
   - Amateur radio stations (HAM)
   - Warehouse logistic management systems
   - Discrimination systems for train or emergency vehicles

If these devices and the AV receiver are used at the same time, the audio may be undesirably stopped or disturbed due to a radio wave interference.
Suggestions for improvement

- Switch off the devices which emit the radio wave.
- Place the interfering devices away from the AV receiver.

- The AV receiver uses radio wave, and a third person can receive the wave on purpose or accidentally. Do not use the communication for important or fatal matters.
- We assume no responsibility whatsoever for any error or damage of network environment or access device resulting from the use of this apparatus.
  Confirm with the provider or access device maker for more information.

Scope of Operation

Use of the AV receiver is limited to home use.
(Transmission distances may be reduced depending on communication environment.)
In the following locations, poor condition or inability to receive radio waves may cause the audio to be interrupted or stopped:

- In reinforced concrete buildings or steel framed or iron framed buildings.
- Near large metallic furniture.
- In a crowd of people or near a building or obstacle.
- In a location exposed to the magnetic field, static electricity or radio wave interference from radio communication equipment using the same frequency band (2.4 GHz) as the AV receiver, such as a 2.4 GHz wireless LAN device (IEEE802.11b/g/n) or microwave oven.
- If you live in a heavily populated residential area (apartment, townhouse, etc.) and if your neighbor's microwave oven is placed near your AV receiver, you may experience radio wave interference. If this occurs, move your AV receiver to a different place.
  When the microwave oven is not in use, there will be no radio wave interference.

Radio Wave Reflections

The radio waves received by the AV receiver include the radio wave coming directly from the devices and waves coming from various directions due to reflections by walls, furniture and building (reflected waves). The reflected waves (due to obstacles and reflecting objects) further produce a variety of reflected waves as well as variation in reception condition depending on locations. If the audio cannot be received properly due to this phenomenon, try moving the location of the wireless LAN device a little.
Also note that audio may be interrupted due to the reflected waves when a person crosses or approaches the space between the AV receiver and the wireless LAN device.

- We assume no responsibility whatsoever for any damages resulting from the use of this apparatus except in the cases deemed acceptable under the applicable laws and regulations.
- Operation in all environment is not guaranteed for wireless LAN. The communication may not be possible or have desirable communication speed.

Precautions

- Do not use this apparatus near an electronic device handling high-accuracy controls or weak signals. Doing so may cause an accident due to a malfunction of the device.
- Do not use this apparatus in use prohibited location such as an aircraft equipment or a hospital. Doing so may cause an accident due to a malfunction of an electronic device or an electro-medical apparatus. Follow the instructions of the medical facilities.

■ Electronic device which requires cautions

Hearing aid, pace maker, other medical electronic devices, fire alarm, automatic door, and other automatic control device.
When using a pace maker or other medical electronic

- devices, confirm with the medical electronic device
- maker or dealer for the effect of the radio wave.

Remote Control Code List

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A.R. Systems	10037, 10556
Accent	10037
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Action	10650
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AEG	11037
Aiko	10037
Aim	10037
Akai	10037, 12676, 10208, 10714, 10556, 12414, 13183, 10178
Akiba	10037
Akito	10037
Akura	10037, 10714, 11667, 11585, 10171, 11037
Alba	11037, 12676, 10037, 10714, 11585
Alien	11037
Allstar	10037
Amstrad	10037, 10171, 11037
Anam	10037, 10650
Andersson	11585, 12676
Anitech	10037
Ansonic	10037
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Ardem	10714, 10037
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Beon	10037
Berthen	10556
Bestar	10037
Bexa	12493
BGH	12414
Black Diamond	11037
Blaupunkt	10195
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Brionvega	10037
Britania	12414
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Carena	10037
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Cascade	10037
Casio	10037
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Chimei	12769
Chun Yun	10000, 11150
Chung Hsin	11150
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Clatronic	10037, 10714
Clayton	11037
Coby	13478
Commercial Solutions	11447
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Conrowa	10698
Contec	10037
Cosmel	10037
CPTEC	10625
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Curtis	12397
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Europa	10037
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Excello	11037
Exquisit	10037

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Formenti	10037
Fraba	10037
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JCB	10000
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Conxxus	01376, 01877, 01982
Coon Creek Telephone	01376
Coon Rapids Municipal Utilities	01376, 01877, 01982
Coop CSCF	01376
Cooperative Television Godahl	01376, 01877, 01982
CoopTel	00858, 01615, 01898
Coosa Cable	01376
Copper Mountain Metropolitan	01376, 01877, 01982
Country Cable	01376, 01877, 01982
Country Cable TV	01376, 01877, 01982
Country Cablevision	01376
Country Cablevision Ltd.	01376
Cowley Telecable	01376, 01877, 01982
Cox	01877, 01376
Craig Cable TV	01376, 01877, 01982
Craw-Kan Telephone Cooperative	02586
Crestview Cable	01376, 01877, 01982
Cross Country TV	01376, 01877, 01982
Crosslake Communications	01376, 01877, 01982

Crow Cable TV	01376, 01877, 01982
CRRS-TV	01376
CRST Telephone Authority	01481, 01998, 03028
Crystal Cable TV	01376, 01877, 01982
CSI Cable	01376, 01877, 01982
CT & R Cable	01376, 01877, 01982
CTC	01376
Cunningham Telephone & Cable	01376
Curtis Cable TV	01376, 01877, 01982
CUTV	01376, 01877, 01982
CWA Cable	01376, 01877, 01982
D & D Cable Systems	01376, 01877, 01982
D & P Communications	01376
Daeryung	01877
Dairyland Cable Systems	01376, 01877, 01982
Dakota Central Telecommunications	02345
Dalton Cable Television	01877, 01982
Darty Box	02436
Davis Communications	01376, 01877, 01982
Dawson City Television	01376, 01877, 01982
DCA Cablevision	01376, 01877, 01982
DDD Cablevision	01376, 01877, 01982
Dean Hill Cable	01376, 01877, 01982
Dean's Cablevision	01376, 01877, 01982
Decca Cable	01376, 01877, 01982
Deffner Cable TV	01376, 01877, 01982
Delhi Telephone	01376, 01877, 01982
Delta	02015, 00660
Delta Cable	01376
Demopolis CATV	01376, 01877, 01982
Denali TV	01376, 01877, 01982
Dery Telecom	01376
Deutsche Telekom	02132
Dickey Rural Networks	01376, 01877, 01982
Digeo	02187
Diode Communications	01376, 01877, 01982
Diverse Communications	01898, 01982
Dixie Cable TV	01376, 01877, 01982
Dixon Telephone	01376, 01877, 01982
DMS Cable	01376, 01877, 01982
Downsville Community Antenna	01376, 01877, 01982
Doylestown Cable TV	01376, 01877, 01982
Drummond Cable TV	01376, 01877, 01982
DTC	01376, 01877, 01982
Du	02401
Dumont Telephone	01376, 01877, 01982
Duncan Cable TV	01376, 01877, 01982
Eagle Broadband	01481, 01998, 03028
Eagle Cablevision	01376, 01877, 01982
Eagle Communications	01376, 02187
Eagle Valley Telephone	01481, 01998, 03028
EagleVision Wireless TV Services	01376, 01877, 01982
East Arkansas Video	01376
East Cleveland Cable	01376, 01877, 01982
East Texas Cable	01376, 01877, 01982
Eastern Cable	01376, 01877, 01982
EastLink	01376
Easton Cable	01877
EasyTEL	01481, 01998, 03028
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Echostar	03452
Electron Enterprises	01376, 01877, 01982
Elk River Cable TV	01376, 01877, 01982
Elkhart TV Cable	01376, 01877, 01982
Emery Telcom Video	01376, 01877, 01982
Emily Coop Telephone	01481, 01615
Enhanced Telecommunications	01376
EnTouch	01376
EPB of Chattanooga	00858
Escape Broadband	01376, 01877, 01982
Eston CATV Cooperative	01376, 01877, 01982
ETAN Industries	01376, 01877, 01982
Etex	02586
Execulink	01376
Eyecom	01376, 01877, 01982

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FairPoint Communications	01376, 01877, 01982
Falls Earth Station	01376, 01877, 01982
FamilyView Cablevision	01376, 01877, 01982
Fannettsburg Cable TV	01376, 01877, 01982
Farmer & Merchant Mutual	01376, 01877, 01982
Farmer's Telephone Cooperative	01998, 03028
Farmers Independent Telephone	01376, 01877, 01982
Farmers Mutual Telephone	01376, 01877, 01982
Fayetteville Electric System	01877
Federated Telephone	01376
Fenton Cablevision	01376, 01877, 01982
FiberCast Cable Communications	01376, 01877, 01982
FiberNet Monticello	01376, 01877, 01982
Fibrant	01376, 01877, 01982
Fidelity Communications	01376
First Cable Of Missouri	01376, 01877, 01982
FirstMile	01376, 01877, 01982
Flint Cable TV	01376, 01877, 01982
Florida Cable	01376
Foothills Rural Telephone Cooperative	01877
Forsyth CableNet	01376, 01877, 01982

Fort Jennings Communications	02586
Fort Towson Cable	01376, 01877, 01982
Foster Communications	01376, 01877, 01982
Frank Howard TV Cable	01376, 01877, 01982
Frankfort Plant Board Cable	01376
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FTC	01877, 01982, 01376
Full Channel TV	01376, 01877, 01982
Full Choice Communications	01376, 01877, 01982
Fusion Broadband	01376, 01877, 01982
Futuristic Cablevision	01376, 01877, 01982
Galaxy American Communication	01376, 01877, 01982
Galaxy Cable	01376, 01877, 01982
Gardonville Cooperative Telephone	01998
Gatehouse Networks	01376, 01877, 01982
Gauthier Cablevision & Electric	01376, 01877, 01982
GCI	01877
General Communications	01376
Genext	01376, 01877, 01982
Geraldine Cable TV	01376, 01877, 01982
Get Real Cable	01376, 01877, 01982
GEUS	01376, 01877, 01982
Giant Communications	01376, 01877, 01982
Giles-Craig Communications	01376, 01877, 01982
Gilmer Cable Television	01376, 01877, 01982
Glasgow Electric Plant Board	01376, 01877, 01982
Glass Antenna Systems	01376, 01877, 01982
Glenwood Telecommunications	01376
Glide Cablevision	01376, 01877, 01982
Globalcom	01376, 01877, 01982
Golden Belt Telephone	02586
Golden Communications	01376, 01877, 01982
Golden Rain Foundation	01376, 01877, 01982
Golden Valley Cable	01376, 01877, 01982
Golden West Telecommunications	01376, 01877, 01982
Goldfield Communications	01376, 01877, 01982
Gorham Communications	01481
Gowrie Cablevision	01376, 01877, 01982
Grafton Cable Communications	01376, 01877, 01982
Grand River Cable	01376, 01877, 01982
Grande Communications	01877, 01376
Great Plains Communications	01376
Green Hills Communications	01376, 01877, 01982
Greene County Cable TV	01376, 01877, 01982
Greenlight Community Broadband	01376, 01877, 01982
Gridley Cable	01376, 01877, 01982
Griswold Cooperative Telephone	01481, 01998, 03028
Grove Cable	01376, 01877, 01982
Grundy Center Utilities	01376, 01877
GTI	01481, 01998, 03028
Guadalupe Valley	01877
Haefele TV	01376, 01877, 01982
Haines Cable TV	01376, 01877, 01982
Hall Beach Cooperative	01376, 01877, 01982
Hamilton County Cable TV	01877, 01982, 01376
Hancel	01376, 01877, 01982
Hargray	01376, 01877, 01982
Harlan Community TV	01376
Harlan Municipal Utilities	01376
Harmony Cable TV	01376, 01877, 01982
Harris Broadband	01376
Harrisonville Telephone	02586
Harron Metrocast	01376, 01877
Hart Cable	01376, 01877, 01982
Hart Electric	01376, 01877, 01982
Hartelco	01376, 01877, 01982
Hastings Cable Vision	01376, 01877, 01982
Hathw@y	02043
Hawaiian Telcom	03028
HBC	01376, 01877, 01982
HBL Communications	01376, 01877, 01982
HCS	01376, 01877, 01982
Healthcare Cable Systems	01376, 01877, 01982
Heart of Iowa Communications	01376, 01877, 01982
Heartland Cable	01376, 01877, 01982
Heartland Wireless Communications	01376, 01877, 01982
Heck's TV & Cable	01376, 01877, 01982
Henderson Telephone	01376, 01877, 01982
Hermosa Cablevision	01376, 01877, 01982
Herr Cable	01376, 01877, 01982
HFU Television	01376, 01877, 01982
Hiawatha Broadband	01376, 01877, 01982
HickoryTech	01898
High Plains Cablevision	01376, 01877, 01982
Highland	01376, 01877, 01982
Hill Top Communications	01376, 01877, 01982
Hinton CATV	01376, 01877, 01982
HLM Cable Corp	01376, 01877, 01982
HomeTel	01376
Hometown Cable	01376, 01877, 01982
Hometown Utilicom	01376, 01877, 01982
Hood Canal Cablevision	01376
Hoonah Community Television	01376, 01877, 01982

Hooper Telephone	01376, 01877, 01982
Horizon Cable TV	01376, 02586
Horizon Telecom	02586
Horry Telephone Cooperative	01376, 01877, 01982
Hospers Telephone	01376, 01877, 01982
Hotwire	02586
Houston Cable	01376, 01877, 01982
Hrvatski Telekom	02132
HTC Communications	01481, 01998, 03028
HTC Services	01376, 01877, 01982
Humax	00660, 02620, 02043, 02165
HunTel Systems	01376
Huxley Communications	01376, 01877, 01982
Hydaburg Cable TV	01376, 01877, 01982
HYDE County Cablevision	01376, 01877, 01982
i-CAN	02437
I-Speed	01376, 01877, 01982
ICE Cable Holdings	01376
ICS Communications	01376, 01877, 01982
Illini Cablevision Of Illinois	01376, 01877, 01982
ImOn Communications	01877
Indco Cable TV	01376, 01877, 01982
Independence Telecom Utility	01376, 01982
Independent Cable Systems of Idaho	01376, 01877, 01982
Indevideo	01376, 01877, 01982
Index Cable TV	01376, 01877, 01982
Innovative Cable TV	01376
Innovative Systems	01898
Inotel	02437
Inside Connect Cable	01376
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Integra Telecom	02345
Inter Mountain Cable	01877
Inter-County Cable	01376, 01877, 01982
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Irvine Community TV	01376, 01877, 01982
ITV-3	01376, 01877, 01982, 03028
J & L Cable	01376, 01877, 01982
J & N Cable	01376, 01877, 01982
Jack McClanahan Cable TV	01376, 01877, 01982
Jackson Energy Authority	01376, 01877, 01982
Jaguar Communications	01376, 01877, 01982
James Cable Partners	01376, 01877, 01982
James Valley Cooperative Telephone	02586
Jayroc Cablevision	01376, 01877, 01982
Jefferson County Cable	01376, 01877, 01982
Jefferson Telecom	01376, 01877, 01982
Jeffersonville Cable TV	01376, 01877, 01982
Jet Broadband	01376
Johnston County Cable	01376, 01877, 01982
Journeyvision Cable	01376, 01877, 01982
JP PTT	01615

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Kalona Cooperative Telephone	02586
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Karban TV Systems	01376, 01877, 01982
KAS Cable TV	01376, 01877, 01982
Kaslo Cable	01376, 01877, 01982
KBS Cable TV	01376
Keene Valley Video	01376, 01877, 01982
Kelley Communications	01376, 01877, 01982
Kennebec Telephone	01376, 01877, 01982
Kennedy Cablevision	01376, 01877, 01982
Kentucky Ridge Country Communications	01376, 01877, 01982
Keta Cable	01376, 01877, 01982
KFW Communications	01376, 01877, 01982
Kincardine Cable TV	01376
Kings Bay Communications	01376, 01877, 01982
Kiss	02132
KLiP	01376, 01877, 01982
KM Telecom	01481
Knology	01877, 01376
KoolConnect	01481
Koomiut Cooperative	01376, 01877, 01982
KPN	02952, 02437
Kraus Electronic Systems	01376, 01877, 01982
Kudzu Cable TV	01376, 01877, 01982
Kugluktuk Cooperative	01376, 01877, 01982
Kuhn Communications	01376, 01877
L & J Cable	01376, 01877, 01982
La Harpe Communications	01376, 01877, 01982
La Harpe Video and Data Services	01376, 01877
Lafayette Utilities System	01376
Laguna Serrano Cable	01376, 01877, 01982
Lake Cable	01376, 01877, 01982
Lakeland Cablevision	01376, 01481, 01877, 01982, 01998
Lakeland Telecom	01481, 01998, 03028
Lakeview Cable	01376, 01877, 01982
Lamont Digital Systems	01376, 01877, 01982
Lang	01376, 01877, 01982
Laurel Highland	01376, 01877, 01982, 02187
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Lehigh Valley Cooperative Telephone	01376, 01877, 01982
Lemonweir Valley Telephone	01481, 01998, 03028

Lexcom Cable Services	01376, 01877, 01982
Liberty Cablevision	01376
Liberty Communications	01481, 02586
Limestone Cablevision	01376, 01877, 01982
Lincoln Cable Television	01376
Lincolnville	01376
Lindsey Communications	01376, 01877, 01982
LISCO	01376, 01877, 01982
Litestream Holdings	01376, 01877, 01982
LNE Telco	01376, 01877, 01982
Localtel	01376, 01877, 01982
Lockesburg Cablevision	01376, 01877
Lodgenet Entertainment	01376, 01877, 01982
Lone Pine Cable TV	01376, 01877, 01982
Longview Communications	01376, 01877, 01982
Lonsdale Video Ventures	01481, 01998, 03028
Loretel Cablevision	01376, 01877, 01982
Loretel Systems	01376
Lost Island Cable TV	01376, 01877, 01982
Lumos Networks	01998, 03028
Lycom Communications	01376, 01877, 01982
M-Tek Systems	01376, 01877, 01982
M.T.C. Cable	01376, 01877, 01982
Maddock Cable TV	01376, 01877, 01982
Madison Communications	01376, 01982
Madison County Cable	01376, 01877, 01982
Magio Sat	02132
Magnet	01615
Mahaska Communications	01376, 01877, 01982
Mainstreet Communications	01376, 01877, 01982
Maitland Cable TV	01376, 01877, 01982
Mallard Cable	01376, 01877, 01982
Manawa Telecom	02586
Manning Municipal Utilities	01376, 01877, 01982
Manti Telecom	01481, 01998, 03028
Marco Island Cable	01376, 01877, 01982
Markdale Cable TV	01376
Marne & Elk Horn Telephone	01376, 01877, 01982
Marquette-Adams Telephone	01376, 01877, 01982
Martelle Communications Cooperative	01376, 01877, 01982
Mascon Cable	01376
Masset-Haida TV Society	01376, 01877, 01982
Massillon Cable	01376
Matanuska Telephone Association	01481, 02586
Matrix Cablevision	01376, 01877, 01982
Mattawamkeag Cablevision	01376, 01877, 01982
McDonough Telephone Cooperative	01376, 01877, 01982
McKee TV Enterprises	01376, 01877, 01982
McNabb Cable	01376, 01877, 01982
MCV Broadband	01877
Media One	01376, 01877, 01982
Mediacom	01376, 01877, 01982
Mediapolis Telephone	01376, 01982
Mediastream	01376
Megacable	01376
Meo	02401
Merrimac Communications	01376, 01877, 01982
Metlakatla Indian Community TV	01376, 01877
MetroCast Cablevision	01376, 01982, 01877
MetroNet	01877, 0858
Metropolitan Cable	01376, 01877, 01982
MGS Cablevision	01376, 01877, 01982
MHTC	01481, 01998, 03028
Mi-Connection	01877
Microwave Satellite Technologies	01481, 01998, 03028
Mid Century Telecom	01481, 01615
Mid Missouri Broadband & Cable	01376, 01877, 01982
Mid Missouri Telephone	01376, 01877, 01982
Mid-Coast Cablevision	01376, 01877, 01982
Mid-Hudson Cable	01376
Mid-Rivers Communications	01376
Mid-South Cablevision	01376, 01877, 01982
Midamerican Cable Systems	01376, 01877, 01982
Midcontinent Communications	01376, 01877, 01982
Midstate Communications	01376, 01877, 01982
Midtel Cable TV	01376, 01877, 01982
Milcom Cable	01376, 01877, 01982
Milford Cable TV	01376, 01877, 01982
Milk River Cable Club	01376, 01877, 01982
Millennium Telecom	01481, 01998, 03028
Millheim TV Transmission	01376, 01877, 01982
Millington CATV	01376, 01877, 01982
Minburn Communications	01481, 01998, 03028
Minerva Valley Cable	01376, 01877, 01982
MINET	01877
MLGC Cable TV	01376, 01877, 01982
MM&G Enterprises	01481, 01998, 03028
MMDS Wireless East	01376, 01877, 01982
Mobius Communications	01376, 01877, 01982
Monroe Cablevision	01376, 01877, 01982
Monroe Utilities	01376, 01877, 01982
Montana Opticom	01376, 01877, 01982
Moosehead Enterprises	01376, 01877, 01982
Morris Broadband	01376
Morristown Utility Systems	01877
Mosaic Telecom	01376, 02586

Motorola	01376, 02437, 02378, 01998, 00858, 02952, 01562, 01982, 02401
Moultrie Telecommunications	01376, 01877, 01982
Mountain Shadows Cable TV	01376, 01877, 01982
Mountain Telecommunications	01376, 01877, 01982
Mountain Zone TV	01376, 01877, 01982
Movistar	03288
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Mt. Baker Cable	01376, 01877, 01982
MTC	01376, 01877, 01982
MTC Technologies	01376, 01982
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Multiband Cable	01376, 01877, 01982
Municipality Cable Operator	01376, 01877, 01982
Murphy Cable	01376, 01877
Murray Electric System	01376, 01877, 01982
Muscatine Power & Water	01376
N.W. Communications	01376, 01877, 01982
National Cable	01376, 01877, 01982
Naujat Cooperative	01376, 01877, 01982
NDTC	01481, 01998, 03028
Nebraska Central Telecom	01376, 01877, 01982
NEIT	01376, 01877, 01982
Nelson County Cablevision	01376, 01877, 01982
Nelsonville TV Cable	01376, 01877, 01982
Nemont Communications	01376, 01877
NET	01883
New Century Communication	01376, 01877, 01982
New Day Broadband	01376, 01877, 01982
New England Cable	01376, 01877, 01982
New Jersey Broadband	01376, 01877, 01982
New Knoxville Cable Systems	01376, 01877, 01982
New North Networks	01376, 01877, 01982
New Paris Quality Cablevision	01376, 01877, 01982
New Visions Communications	01376, 01877, 01982
New Windsor Cable TV	01376, 01877, 01982
Newcastle Cablevision	01376, 01877, 01982
Newpath Communications	01877, 01982
NewWave Communications	01376, 02187
NexHorizon Communications	01376, 01877, 01982
Nexicom Communications	01376, 01877, 01982
Nextgen Communications	01376, 01877
Niagara Community TV Cooperative	01376, 01877, 01982
Nimpkish Valley Communcations	01376, 01877, 01982
Nittany Media	01376
Nor-Cal Cable Systems	01376, 01877, 01982
Nortex Communications	01376, 01877, 01982
North American Communications	01376, 01877, 01982
North Central Telephone	02345
North Crossroads Communications	01376, 01877, 01982
North Dakota Telephone	02586
North Star Cablevision	01376, 01877, 01982
North State Communications	00858
North Texas Broadband	01376, 01877, 01982
North Yellowstone Cable TV	01376, 01877, 01982
Northern Cable Holdings	01376, 01877, 01982
Northern Lakes Cable TV	01376, 01877, 01982
Northland Communications	01376
Northside TV	01376, 01877, 01982
Northstar Broadband	01376, 01982
Northwest Communications	01376, 01877, 01982
Northwest Community	01877
Northwest Iowa Telephone	01877
Northwest Telephone Cooperative	01376, 01877, 01982
NorthwesTel	01376
Norvado	02586
Norwood Light Broadband	01376
Nova Cable Management	01376, 01877, 01982
Nova Cablevision	01376, 01877, 01982
Novus	01376, 01877
NPG Cable	01376
Nsight	02345, 02586
NTC Cable Services	01376, 01877, 01982
nTelos	01998
NTL	01060
NTS Communications	01376, 01877, 01982
NU Telecom	01998, 03028
NuLink	01877, 01376, 01982
Numericable	02436
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Oasis Communications	01376, 01877, 01982
Oi TV	03452, 03454
Omni III Cable TV	01376, 01877, 01982
Oneida Cablevision	01376, 01877, 01982
OneLink	01376, 01877, 01982
OneSource Communications	01376
Ono	01562
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Opp Cablevision	01376, 01877, 01982
Optimum	01877
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Orange	02407
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Oregon Cable Group	01376, 01877, 01982
Orion Cablesystems	01376, 01877, 01982

OTEC Communications	02586
Our Cable	01376, 01877, 01982
Overton County Cable	01376, 01877, 01982
Oxford Networks	01376, 01877, 01982
Pace	01877, 01060, 02620, 01982, 01582, 01376, 01883, 02401, 03454
Packerland Broadband	01376
Paleajook Cooperative	01376, 01877, 01982
Palmer Mutual Telephone	01376, 01877, 01982
Palmetto Rural Telephone Cooperative	00858
Panasonic	01982
Pangnirtung Cooperative	01376, 01877, 01982
Panhandle Telephone	01376
Panora Telecommunications	01481
Paragould Light & Water	01376, 01877, 01982
Parish Communications	01376, 01877, 01982
Park Region Mutual Telephone	01481, 01998, 02345, 03028
Park TV & Electronics	01376, 01877, 01982
Partner Communications	01376, 01877, 01982
Pathway Com-Tel	01376, 01877, 01982
Patterson Cable TV	01376, 01877, 01982
Paul Bunyan Communications	02586
PBT Cable Services	01376, 01877, 01982
PC One Cable	01376, 01877, 01982
PDQ Cable TV	01376, 01877, 01982
PEC Cablevision	01376, 01877, 01982
Pegasus Communications	01376, 01877, 01982
Peoples CATV	01376, 01877, 01982
Persona Communications	01376, 01877, 01982
Philippi Communications	01376, 01877, 01982
Philips	01582, 02294
Phoenix	01376
Phoenix Cable	01376, 01877, 01982
Phonoscope Communications	01376, 01877, 01982
Pickwick Cablevision	01376, 01877, 01982
Piedmont Cable Services	01376, 01877, 01982
Pine Bluff Cable	01376
Pine Island Telephone	01481, 01998, 03028
Pine River Cable	01376, 01877, 01982
Pine Tree Cablevision	01376, 01877, 01982
Pineland Telephone Cooperative	01481, 01615, 01898, 02586
Pinpoint Communications	01376, 01877, 01982
Pioneer	01877
Pioneer Cable	01376, 01877, 01982
Pioneer Communications	01376, 01877, 01982
Pioneer Long Distance	01898, 01615
Pitcairn Community Cable TV	01376, 01877, 01982
Plantation Cable System	01376, 01877, 01982
Pleasant Vision	01376, 01877, 01982
Polar Communications	02586
Polaris Cable	01376, 01877, 01982
Ponderosa Cablevision	01376, 01877, 01982
Poplar Bluff Municipal Utilities	01481, 01998, 03028
Portal Cablevision	01376, 01877, 01982
Portugal Telecom	02401
Post Cablevision	01376, 01877, 01982
Premier Communications	01376
Premiere	02620
Price County Telephone	01481, 01998, 03028
Prime Cable Corporation	01376, 01877, 01982
Prime Time Cable	01376, 01877, 01982
Princetown Cable	01376, 01877, 01982
Private Cable Systems	01376, 01877, 01982
Private Network Cable Systems	01376, 01877, 01982
Project Mutual Telephone	01481, 01998, 03028
Project Services	01376, 01877, 01982
PSC	01481, 01998, 03028
PTCI	01376
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Quality Cable TV	01376, 01877, 01982
Quality One Technologies	01481, 01998, 03028
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SKY Deutschland	02443, 01114, 01915, 02620
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Star Choice	00869
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Sunny	01300
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Boxee	03693
Claritas	01272
CyberPower	01272
D-Link	03693
Daily Media	01272
Dell	01272
Digitech	02260
Elonex	01272
Eminent	02260
Emtec	02709
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Fujitsu Siemens	01272
Gateway	01272
Hewlett Packard	01272
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Media Center PC	01272
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Northgate	01272
Packard Bell	01272
Philips	01272
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Stack 9	01272
Systemax	01272
Tagar Systems	01272
Toshiba	01272
Touch	01272
Trust	01272
VIA Technologies	01272
Viewsonic	01272
Voodoo	01272

Western Digital	02558
Woxter	02709
Xbox	01805, 01272
ZT Group	01272

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Advantage	70032
AH!	70157
Aiwa	70157
Arcam	70157
Atoll Electronique	70157
Audio Research	70157
Audiolab	70157
Audiomeca	70157
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AVI	70157
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Panasonic	70303, 70029
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Primare	70157
Proton	70157
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RCA	70032
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Universum	70157
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Zonda	70157

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Arcam	40076
Audiolab	40029, 40229
Carver	40029
Denon	40076
Grundig	40029
Harman/Kardon	40029
Inkel	40070
JVC	40244
Kenwood	40070
Magnavox	40029
Marantz	40029
Myryad	40029
Onkyo	42157
Optimus	40027
Panasonic	40229
Philips	40029, 40229
Pioneer	40027
Polk Audio	40029
Radiola	40029
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Revox	40029
Sansui	40029
Sony	40243, 40170
Tascam	73095
Technics	40229
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Yamaha	40097

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Apple	81115
Jamo	82228
Onkyo	81993, 82351, 82990
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Access Communications	01376, 01877
Adams Cable TV	01376
ADB	01920
Armstrong	01376, 01877
Arris	02187
Atlantic Broadband	01877
ATMC	01376
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Bright House	01877, 01376
Buckeye Cable System	01376, 01877, 02187
Cable Axion Digitel	01376
Cable One	01376, 01877
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Cablevision du Nord	01376
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Cincinnati Bell	01877, 01376
Cisco	01877, 02589, 01982, 01582, 01883, 02401, 03265
Citycable	03477
Cogeco	01376, 01877, 01982
Comcast	01376, 01877, 01982, 02187
Cox	01877, 01376
Darty Box	02436
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Grande Communications	01877, 01376
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Samsung	03477, 01877, 01987, 02589, 03265
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SKY Deutschland	02620
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Telenet	01920, 03477
Telewest	01987
Thomson	01582
Time Warner	01877, 01376, 02187
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Westman Communications	01376, 02187
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ADB	02586, 01481, 01998, 03028
Alcom	02437
Altibox	02437
Amino	01615, 01481, 01898, 01998, 03028
Arkwest	01481, 01998
Arvig Communication Systems	01998, 02345
AT&T	00858
ATMC	01998, 03028
Ballard Rural Telephone Cooperative	02586
Bayland Communications	02586
Bell	01998
Bell Aliant	01998
Bell Fibe TV	01998
Bledsoe Telephone Cooperative	01481, 01998
Bloomingdale Communications	01481, 01998, 03028
Blue Valley Telecommunications	01898
Bouygues Telecom	03007
Brandenburg Telecom	01481, 01998
BT	02294
BTC Broadband	02586
Burlington Telecom	01481, 01615
Cabovis	02436
CalTel Connections	02586
Canby Telcom	01481
Cannon Valley Cablevision	01481, 01998
CenturyLink	01998
Cisco	00858, 03028, 02345, 02378
ClubInternet	02132
CoopTel	00858, 01615, 01898
CRST Telephone Authority	01481, 01998
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Dalton Cable Television	01877, 01982
Delta Cable	01376
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Du	02401
Eagle Broadband	01481, 01998
Eagle Valley Telephone	01481, 01998
EasyTEL	01481, 01998, 03028
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Farmer's Telephone Cooperative	01998, 03028
Golden Belt Telephone	02586
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Griswold Cooperative Telephone	01481, 01998
GTI	01481, 01998, 03028
Harrisonville Telephone	02586
Hathw@y	02043
Horizon Cable TV	02586
Hotwire	02586
HTC Communications	01481, 01998
Innovative Systems	01898
Inotel	02437
Integra Telecom	02345
Interstate Cablevision	01481, 01998
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Kiss	02132
KM Telecom	01481
KoolConnect	01481
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Lakeland Cablevision	01481, 01998
Lemonweir Valley Telephone	01481, 01998
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Manawa Telecom	02586

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Minburn Communications	01481, 01998, 03028
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Motorola	02378, 01998, 02437, 0858, 02952, 01376
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North Central Telephone	02345
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Norvado	02586
Nsight	02345, 02586
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Orange	02407
OTEC Communications	02586
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Panora Telecommunications	01481
Paul Bunyan Communications	02586
Pine Island Telephone	01481, 01998
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Poplar Bluff Municipal Utilities	01481, 01998
Portugal Telecom	02401
Price County Telephone	01481, 01998
Project Mutual Telephone	01481, 01998
PSC	01998
Quality One Technologies	01481, 01998
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Readlyn Telephone	02586
Reservation Telephone	01998, 02345
River Valley Telecommunications	01481, 01998
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Samsung	02407
Sasktel	01998
Scientific Atlanta	00858, 02345, 03028
Silver Star Communications	01481, 01998, 03028
SingTel	01998
SKY Deutschland	02620
Skyline Cable	02586
SkyPix	01481, 01998
Smile Content	02437
Smithville	02586
Sogetel	01998
SureWest	01481, 01998, 02586
Surry Telephone	02586
SWAT Cooperative	01481, 01998, 03028
T-Home	02132
Telefonica	03288, 03028
Telus	03028
TeNeT	01898
Thomson	03007, 02407
TV Northeast	01481, 01998
TVB	01615
Twin Valley Communications	02586
United Telephone	02586
Venture Communications Cooperative	01998
Verizon	02378
Viken Fibernett	02437
Vivo	03288
Watch TV	01481, 01998
West Carolina Telephone	03028
Western Wisconsin Communications	02586
Westphalia Broadband	02586
Wilkes Telecommunications	01481, 01998
Yadkin Valley Telecom	02345

■ IPTV PVR Combination

ADB	02437
Altibox	02437
Amino	01615, 01898
AT&T	00858
ATMC	03028
Beeline	03028
Belgacom TV	02132
Bell	01998
Bell Aliant	01998
Bell Fibe TV	01998
Bouygues Telecom	03007
BT	02294
Cabovis	02436
CenturyLink	01998
Cisco	00858, 03028, 02132, 02345, 02378
ClubInternet	02132
Deutsche Telekom	02132
Du	02401
Echostar	03452
Freebox	01976
i-CAN	02437
Innovative Systems	01898
InviTV	02437
Kiss	02132
KPN	02952, 02437
Lumos Networks	01998
Magio Sat	02132
Magnet	01615
Meo	02401
Motorola	02437, 02378, 00858, 01998, 02952, 02401
MTS	01998
Numericable	02436
Oi TV	03452, 03454
Orange	02407
Pace	02401, 03454
Philips	02294
Portugal Telecom	02401
Sagem	02407, 03288
Sagemcom	02436, 02407, 03007
Samsung	02407
Sasktel	01998
Scientific Atlanta	00858, 02345, 02401, 03028
SKY Deutschland	02620
SureWest	01998
T-Home	02132
Telefonica	03028, 03288
Telus	03028
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DirecTV	20739
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Sony	20636
TiVo	20739, 20636

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Asia, Oceania, Middle East, Africa
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Visit the Onkyo web site for the latest update.

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ONKYO

All the quality of Hi-Fi Component audio... on the go!

ES-HF300
On-Ear Headphones

The audiophile's passion is defined in these classic closed-back headphones, with 40 mm (1 9/16") titanium drivers tuned for super-clear treble and deep, solid bass.

Gold-Plated Connections

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With flat non-tangle elastomer cable and folding earcups, portability meets component-quality sound in a classy, understated design.

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Detachable Tangle-Free Cable (ES-FC300)

High Purity 6N Oxygen-Free Copper Cable (ES-HF300)

IE-HF300
In-Ear Headphones

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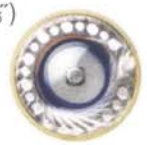
Gold-Plated Connections

IE-FC300
In-Ear Headphones

Balancing deep bass with a clean, detailed mid-range, these aluminum earphones come with a brilliant non-tangle cable designed for the daily commute.

Cable Options

High-Performance 14.3 mm (9/16") Dynamic Drivers



High Purity 6N Oxygen-Free Copper Cable (IE-HF300)

Rugged Aluminum Construction

Detachable Tangle-Free Cable (IE-FC300)

Final product may differ from product shown. Cable features 3.5 mm (⅛") stereo mini plug. Use with some components may require an adapter.

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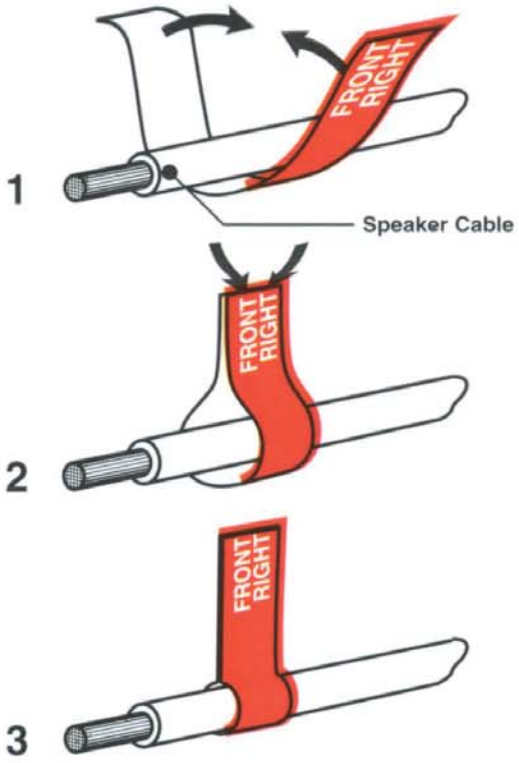

FRONT LEFT

FRONT LEFT

FRONT LEFT

FRONT LEFT

FRONT RIGHT

FRONT RIGHT

FRONT RIGHT

FRONT RIGHT

SURROUND LEFT

SURROUND LEFT

SURROUND LEFT

SURROUND LEFT

SURROUND RIGHT

SURROUND RIGHT

SURROUND RIGHT

SURROUND RIGHT

CENTER

CENTER

CENTER

CENTER

FRONT HIGH LEFT

FRONT HIGH LEFT

FRONT HIGH LEFT

FRONT HIGH LEFT

SURROUND BACK LEFT

SURROUND BACK LEFT

SURROUND BACK LEFT

SURROUND BACK LEFT

FRONT HIGH RIGHT

FRONT HIGH RIGHT

FRONT HIGH RIGHT

FRONT HIGH RIGHT

SURROUND BACK RIGHT

SURROUND BACK RIGHT

SURROUND BACK RIGHT

SURROUND BACK RIGHT

FRONT WIDE LEFT

FRONT WIDE LEFT

FRONT WIDE LEFT

FRONT WIDE LEFT

SP-B/ZONE 2 LEFT

SP-B/ZONE 2 LEFT

SP-B/ZONE 2 LEFT

SP-B/ZONE 2 LEFT

FRONT WIDE RIGHT

FRONT WIDE RIGHT

FRONT WIDE RIGHT

FRONT WIDE RIGHT

SP-B/ZONE 2 RIGHT

SP-B/ZONE 2 RIGHT

SP-B/ZONE 2 RIGHT

SP-B/ZONE 2 RIGHT

English

For Customers Using an RIHD-compatible TV, Player, or Recorder

This unit allows interoperability of the CEC (Consumer Electronics Control) specified in the HDMI standard, which is known as RIHD. Various linked operations can be performed by connecting this unit to an RIHD-compatible TV, player, or recorder. Initial setting is set to off, so it is required to change the setting to on.
For the details of connection, function and operation, refer to **"Using an RIHD-compatible TV, Player, or Recorder"** in the operating instructions, and perform the settings accordingly.

Français

Pour les utilisateurs d'un téléviseur, d'un lecteur ou d'un enregistreur compatible RIHD

Cet appareil autorise l'interopérabilité du CEC (Consumer Electronics Control) spécifié par la norme HDMI, connue sous le nom RIHD. De nombreuses opérations liées peuvent être réalisées en raccordant cet appareil à un téléviseur, un lecteur ou un enregistreur compatible RIHD.
Comme le réglage initial est désactivé, vous devez l'activer.
Pour la connexion, le fonctionnement et l'utilisation détaillés, consultez **« Utilisation d'un téléviseur, d'un lecteur ou d'un enregistreur compatible RIHD »** dans le mode d'emploi et procédez aux réglages appropriés.

Español

Para clientes que utilizan un televisor, reproductor o grabador compatible con RIHD

Esta unidad permite la interoperabilidad del CEC (Consumer Electronics Control, control de equipo electrónico) especificado en el estándar HDMI, conocido como RIHD. Es posible realizar varias operaciones combinadas conectando esta unidad a un televisor, reproductor o grabador compatible con RIHD.
El ajuste inicial está establecido en Off (apagado), de manera que es necesario cambiar el ajuste a On (encendido).
Consulte los detalles de conexión, función y operación, en **"Uso de un televisor, reproductor o grabador compatible con RIHD"** en las instruciones de operación, y realice los ajustes como corresponda.

Italiano

Per i clienti che utilizzano una TV, un lettore o un registratore compatibili con RIHD

Questa unità consente l'interoperabilità del CEC (Controllo Elettronica Consumatore) specificato nello standard HDMI, noto come RIHD. Collegando questa unità a una TV, lettore o registratore compatibili con RIHD, è possibile effettuare varie operazioni collegate.
L'impostazione iniziale è su off, ed è necessario metterla su on.
Per informazioni sul collegamento, funzionamento e utilizzo, far riferimento a **"Uso di una TV, lettore o registratore compatibili con RIHD"** nelle istruzioni d'uso, ed eseguire le impostazioni seguendo le istruzioni.

Deutsch

Verwendung eines RIHD-kompatiblen Fernsehers, Players oder Recorders

Dieses Gerät ermöglicht eine Interoperabilität der CEC (Consumer Electronics Control/Steuerung Unterhaltungselektronik), die im HDMI-Standard spezifiziert wird, der als RIHD bekannt ist. Es können verschiedene verknüpfte Operationen ausgeführt werden, indem dieses Gerät an einen RIHD-kompatiblen Fernseher, Player oder Recorder angeschlossen wird.
Die ursprüngliche Einstellung steht auf „aus". Man muss also die Einstellungen auf „ein" stellen.
Einzelheiten zum Anschluss, Funktion und Betrieb finden Sie auf **„Verwendung eines RIHD-kompatiblen Fernsehers, Players oder Recorders"** in der Betriebsanleitung. Führen Sie die Einstellungen entsprechend aus.

Nederland

Voor klanten die een RIHD-compatibele TV, speler of recorder gebruiken

Deze unit laat interactiviteit toe van de CEC (Consumer Electronics Control) gespecificeerd in de HDMI-norm, die bekend staat als RIHD. Verschillende gekoppelde bedieningen kunnen worden uitgevoerd door deze unit aan te sluiten op een RIHD-compatibele TV, speler of recorder.
De oorspronkelijke configuratie staat op Af, zodat ze moet worden gewijzigd naar Aan.
Voor details over de aansluiting, functie en bediening, raadpleeg de **"Een RIHD-compatibele TV, speler of recorder gebruiken"** in de bedieningshandleiding, en voer de instellingen overeenkomstig uit.

Svenska

Gäller kunder med en en RIHD-kompatibel TV, spelare eller brännare

Denna enhet tillåter interoperabilitet med CEC (Consumer Electronics Control) som är specificerad i HDMI-standarden, som kallas RIHD. Olika länkade manövrar kan utföras genom att ansluta denna enhet till en RIHD-kompatibel TV, spelare eller brännare.
Initial inställning är av så den måste ändras till på.
För detaljerad information om anslutning, funktion och handhavande, se **"Att använda en RIND-kompatibel TV, spelare eller brännare"** i bruksanvisningarna och utför inställningarna därefter.

Русский

Информация для пользователей, использующих телевизоры, плееры и записывающие устройства с поддержкой RIHD

Данное устройство поддерживает CEC (протокол дистанционного управления), указанный в стандарте HDMI, известный под названием RIHD. При подключении данного устройства к телевизору, плееру или записывающему устройству с поддержкой RIHD становятся доступны различные операции.
Первоначально данная функция отключена, поэтому ее необходимо будет включить.
Подробные сведения о подключении, функциях и работе см. в разделе **"Использование телевизора, плеера или записывающего устройства с поддержкой RIHD"** инструкций по эксплуатации, где также описана процедура настройки.

Português

Para Clientes que Utilizem um Televisor, um Leitor ou um Gravador Compatível com RIHD

Esta unidade permite a interoperabilidade do CEC (Consumer Electronics Control - Controlo de Equipamentos de Eletrónica de Consumo) especificado na norma HDMI, e que é conhecida como RIHD. É possível efetuar várias operações combinadas ligando esta unidade a um televisor, leitor ou gravador compatível com RIHD.
A definição inicial está configurada como desativada, pelo que é necessário ativar a definição.
Para obter mais informações sobre a ligação, funções e funcionamento, consulte **"Utilizar um Televisor, um Leitor ou um Gravador Compatível com RIHD"** nas instruções de funcionamento e efetue as definições de modo adequado.

繁體中文

適用於使用 RIHD 相容電視、播放機或錄影機的客戶

此裝置提供與 HDMI 標準（即 RIHD）中指定 CEC（消費電子控制裝置）的互操作性。 將此裝置連接到 RIHD 相容電視、播放機或錄影機，即能進行多項連接操作。
原始設置為關閉，因此必須將此設置更改為開啟。
如需連接、功能和操作的詳細信息，請參閱操作指示中的 **「使用 RIHD 相容電視、播放機或錄影機」**，然後依其中說明進行設置。

简体中文

适用于使用 RIHD 兼容电视、播放器或录制器的客户

此装置支持在 HDMI 标准中指定的 CEC（消费性电子控制）互操作性，称为 RIHD。可通过连接此装置到 RIHD 兼容电视、播放器或录制器来执行各种连接操作。
初始设置为关闭，因此需要变更设置为开启。
连接、功能和操作的详细信息，请参考操作指南中的 **"使用RIHD兼容电视、播放器或录制器"** 并遵照指南进行设置。

日本語

RIHD と互換性のあるテレビやプレーヤー / レコーダーをご使用になる方へ

本機は、HDMI 規格で定められている CEC（Consumer Electronics Control）を使用した連動動作を行うことができ、RIHD と呼んでいます。本機を RIHD と互換性のあるテレビやプレーヤー、レコーダーに接続してお使いになると、いろいろなリンク操作ができます。
初期設定はオフになっておりますので、オンに設定を変更する必要があります。
接続や動作、操作方法についての詳細は、取扱説明書「RIHD と互換性のあるテレビやプレーヤー / レコーダーをご使用になるには」をご覧になり、設定をしてください。

En Fr Es It De Nl Sv Ru Pt Ct Cs Ja

Y1307-4

SN 29355782C

* 2 9 3 5 5 7 8 2 C *

ONKYO

Y1401-1

* 2 9 4 0 1 7 8 3 *

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.

    When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Damage Requiring Service
    Unplug the apparatus from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    - **A.** When the power-supply cord or plug is damaged,
    - **B.** If liquid has been spilled, or objects have fallen into the apparatus,
    - **C.** If the apparatus has been exposed to rain or water,
    - **D.** If the apparatus does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the apparatus to its normal operation,
    - **E.** If the apparatus has been dropped or damaged in any way, and
    - **F.** When the apparatus exhibits a distinct change in performance this indicates a need for service.
16. Object and Liquid Entry
    Never push objects of any kind into the apparatus through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
    The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.
    Don't put candles or other burning objects on top of this unit.
17. Batteries
    Always consider the environmental issues and follow local regulations when disposing of batteries.
18. If you install the apparatus in a built-in installation, such as a bookcase or rack, ensure that there is adequate ventilation.
    Leave 20 cm (8") of free space at the top and sides and 10 cm (4") at the rear. The rear edge of the shelf or board above the apparatus shall be set 10 cm (4") away from the rear panel or wall, creating a flue-like gap for warm air to escape.

Precautions

1. **Recording Copyright**—Unless it's for personal use only, recording copyrighted material is illegal without the permission of the copyright holder.
2. **AC Fuse**—The AC fuse inside the unit is not user-serviceable. If you cannot turn on the unit, contact your Onkyo dealer.
3. **Care**—Occasionally you should dust the unit all over with a soft cloth. For stubborn stains, use a soft cloth dampened with a weak solution of mild detergent and water. Dry the unit immediately afterwards with a clean cloth. Don't use abrasive cloths, thinners, alcohol, or other chemical solvents, because they may damage the finish or remove the panel lettering.
4. **Power**
   WARNING
   BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.
   AC outlet voltages vary from country to country. Make sure that the voltage in your area meets the voltage requirements printed on the unit's rear panel (e.g., AC 230 V, 50 Hz or AC 120 V, 60 Hz).

   The power cord plug is used to disconnect this unit from the AC power source. Make sure that the plug is readily operable (easily accessible) at all times.

   For models with [**POWER**] button, or with both [**POWER**] and [**ON/STANDBY**] buttons:
   Pressing the [**POWER**] button to select OFF mode does not fully disconnect from the mains. If you do not intend to use the unit for an extended period, remove the power cord from the AC outlet.

   For models with [**ON/STANDBY**] button only:
   Pressing the [**ON/STANDBY**] button to select Standby mode does not fully disconnect from the mains. If you do not intend to use the unit for an extended period, remove the power cord from the AC outlet.
5. **Preventing Hearing Loss**
   Caution
   Excessive sound pressure from earphones and headphones can cause hearing loss.
6. **Batteries and Heat Exposure**
   Warning
   Batteries (battery pack or batteries installed) shall not be exposed to excessive heat as sunshine, fire or the like.
7. **Never Touch this Unit with Wet Hands**—Never handle this unit or its power cord while your hands are wet or damp. If water or any other liquid gets inside this unit, have it checked by your Onkyo dealer.
8. **Handling Notes**
   - If you need to transport this unit, use the original packaging to pack it how it was when you originally bought it.
   - Do not leave rubber or plastic items on this unit for a long time, because they may leave marks on the case.
   - This unit's top and rear panels may get warm after prolonged use. This is normal.
   - If you do not use this unit for a long time, it may not work properly the next time you turn it on, so be sure to use it occasionally.

For U.S. models

FCC Information for User
CAUTION:
The user changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

RF Exposure Compliance

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE).
But it is desirable that it should be installed and operated keeping the radiator at least 20 cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

For Canadian Models

NOTE:
CAN ICES-3 B/NMB-3 B
For models having a power cord with a polarized plug:
CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION:
AFIN DE REDUIRE LES RISQUES D'INCENDIE ET DE DECHARGE ELECTRIQUE, NE PAS EXPOSER CET APPAREIL A LA PLUIE OU A L'HUMIDITE.

DANGER:
AFIN D'EVITER TOUT DANGER DE DECHARGE ELECTRIQUE, NE PAS OUVRIR LE BOITIER (OU L'ARRIERE) DE L'APPAREIL. CONFIER TOUT TRAVAIL D'ENTRETIEN OU DE REPARATION A UN TECHNICIEN QUALIFIE.

Un symbole d'éclair fléché dans un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur le fait que certains organes internes non-isolés de l'appareil sont traversés par un courant électrique assez dangereux pour constituer un resque d'électrocution.

Un point d'exclamation dans un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur des instructions importantes relatives à l'entretien et à l'utilisation du produit.

Remarques importantes pour votre sécurité

1. Veuillez lire ces instructions.
2. Veuillez conserver ces instructions.
3. Respectez tous les avertissements.
4. Suivez toutes les instructions.
5. Ne vous servez pas de cet appareil à proximité d'eau.
6. Essuyez le boîtier avec un chiffon sec uniquement.
7. Ne bloquez pas les orifices d'aération. Installez cet appareil en suivant les instructions du fabricant.
8. Ne le placez pas à proximité de sources de chaleur telles que radiateurs, chauffage, poêles ou autre dispositif (y compris les amplificateurs) générateur de chaleur.
9. N'essayez pas de circonvenir le dispositif de sécurité que représente une fiche polarisée ou une fiche avec mise à la terre. Une fiche polarisée dispose de deux lames dont l'une est plus large que l'autre. Une fiche avec terre est munie de deux lames ainsi que d'une broche de mise à la terre. La lame la plus large ou la broche assurent votre sécurité. Si la fiche fournie ne peut être insérée dans la prise murale, demandez à un électricien de remplacer la prise.
10. Protégez le cordon d'alimentation en évitant qu'on ne marche pas dessus et qu'il ne soit plié (notamment au niveau des fiches, des cache-câbles et de la sortie de l'appareil).
11. Servez-vous exclusivement des fixations/accessoires préconisés par le fabricant.
12. Utilisez exclusivement le chariot, le support, le trépied, la fixation ou la table spécifié(e) par le fabricant ou vendu(e) avec l'appareil. Un chariot contenant l'appareil doit toujours être déplacé avec précaution pour éviter qu'il ne se renverse et blesse quelqu'un.

13. Débranchez l'appareil durant un orage ou lorsqu'il reste inutilisé longtemps.
14. Veuillez faire appel à un technicien qualifié pour l'entretien. Un entretien est indispensable si l'appareil a été endommagé d'une façon ou d'une autre : cordon d'alimentation ou fiche endommagée, liquide renversé ou chute de petits objets dans l'appareil, exposition à la pluie ou à une humidité excessive, fonctionnement anormal ou chute de l'appareil.
15. Dommages nécessitant réparation
    Débranchez l'appareil du secteur et confiez-le à un technicien qualifié lorsque :
    - **A.** Le cordon d'alimentation ou sa fiche sont endommagés.
    - **B.** Des objets sont tombés dans l'appareil ou du liquide a été renversé et a pénétré ce dernier.
    - **C.** L'appareil a été exposé à la pluie.
    - **D.** L'appareil ne semble pas fonctionner normalement lorsque vous l'utilisez en respectant les instructions données. N'effectuez que les réglages préconisés dans le manuel car un mauvais réglage d'autres commandes risque d'endommager l'appareil et nécessitera un long travail de remise en état par un technicien qualifié.
    - **E.** L'appareil est tombé ou son boîtier est endommagé.
    - **F.** Ses performances semblent affectées.
16. Pénétration de corps étrangers et de liquide
    Veillez à ne pas insérer d'objets à l'intérieur de l'appareil car ils pourraient toucher des points de tension dangereux ou provoquer des court-circuits : il y a risque d'incendie ou d'électrocution.
    Veillez à ne jamais exposer l'appareil à des gouttes ou des jets d'eau. Ne déposez aucun objet contenant un liquide (un vase, par exemple) sur l'appareil.
    Ne déposez pas de bougies ou d'autres objets brûlants sur cette appareil.
17. Piles
    Songez à l'environnement et veillez dès lors à respecter les consignes officielles pour la liquidation de piles épuisées.
18. Veillez à n'installer cet appareil que dans un rack ou un meuble qui n'entrave pas la ventilation.
    Laissez un espace libre de 20 cm au-dessus et à côté de l'appareil ainsi que 10 cm en face arrière. La face arrière du rack ou du meuble doit se trouver à 10 cm ou plus du mur pour assurer une aération adéquate en vue de dissiper la chaleur.

Précautions

1. **Enregistrement et droits d'auteur—**Outre pour l'utilisation privée, tout enregistrement d'œuvres protégées par des droits d'auteur est interdit sans l'accord préalable du détenteur de ces droits.
2. **Fusible—**Le fusible à l'intérieur du appareil ne peut pas être remplacé par l'utilisateur. Si vous n'arrivez pas à mettre l'appareil sous tension, adressez-vous à votre revendeur Onkyo.
3. **Entretien—**Essuyez régulièrement le boîtier de l'appareil avec un chiffon doux et sec. Vous pouvez éliminer les taches rebelles avec un chiffon légèrement imbibé d'eau et de détergent doux. Essuyez ensuite l'appareil avec un chiffon propre et sec. N'utilisez jamais de chiffons rêches, de dissolvant, d'alcool ou d'autres solvants chimiques car ceux-ci pourraient endommager la finition ou faire disparaître la sérigraphie du boîtier.
4. **Alimentation**
   AVERTISSEMENT
   LISEZ LES CONSIGNES SUIVANTES AVANT DE BRANCHER L'APPAREIL AU SECTEUR POUR LA PREMIÈRE FOIS.
   La tension du secteur change selon le pays. Vérifiez que la tension du secteur dans votre région correspond aux caractéristiques électriques figurant en face arrière de l'appareil (CA 230 V, 50 Hz ou CA 120 V, 60 Hz, par exemple).

   Pour débrancher l'unité du secteur, veuillez déconnecter le cordon d'alimentation. Songez à faire le nécessaire pour que la fiche du cordon soit accessible à tout moment.

   Pour les modèles dotés du bouton [**POWER**], ou dotés à la fois du bouton [**POWER**] et du bouton [**ON/ STANDBY**] :
   Presser le bouton [**POWER**] pour sélectionner le mode OFF ne permet de se déconnecter du secteur. Si vous n'avez pas l'intention d'utiliser l'appareil pendant une période prolongée, débranchez le cordon d'alimentation de la prise murale.

   Pour les modèles dotés uniquement du bouton [**ON/ STANDBY**] :
   Presser le bouton [**ON/STANDBY**] pour sélectionner le mode veille ne permet de se déconnecter du secteur. Si vous n'avez pas l'intention d'utiliser l'appareil pendant une période prolongée, débranchez le cordon d'alimentation de la prise murale.
5. **Prévention de la perte d'acuité auditive**
   Prudence
   Une pression sonore excessive provenant d'oreillettes ou d'un casque peut entraîner une perte d'acuité auditive.
6. **Piles et exposition à la chaleur**
   Avertissement
   Evitez d'exposer les piles (dans leur emballage ou installées dans un appareil) à une chaleur excessive (en plein soleil, près d'un feu etc.).
7. **Ne touchez jamais cet appareil avec des mains mouillées—**Ne manipulez jamais cet appareil ou son cordon d'alimentation avec des mains mouillées ou humides. Si de l'eau ou tout autre liquide pénètre à l'intérieur de l'appareil, faites-le vérifier par votre revendeur Onkyo.
8. **Remarques concernant la manipulation**
   - Si vous devez transporter cet appareil, servez-vous de l'emballage d'origine pour l'emballer comme il l'était lors de son acquisition.
   - Ne posez pas d'objets en caoutchouc ou en plastique à demeure sur cet appareil car ils risquent de laisser des marques sur le boîtier.
   - Les panneaux supérieur et latéraux de l'appareil peuvent devenir chauds après un usage prolongé. C'est parfaitement normal.
   - Si vous n'utilisez pas l'appareil durant une période assez longue, il risque de ne pas fonctionner convenablement à la prochaine mise sous tension; veillez donc à l'utiliser de temps en temps.

Pour les modèles des États-Unis

Information FCC pour l'Utilisateur
PRUDENCE :
Les changements ou les modifications de l'utilisateur qui ne sont pas explicitement approuvés par la partie responsable de la conformité aux normes pourraient mettre fin au droit de l'utilisateur d'utiliser le matériel.

REMARQUE :
Cet appareil a été testé et s'est avéré conforme aux limites pour les appareils numériques de catégorie B, en vertu des règles de la Partie 15 de la FCC Ces limites sont conçues pour fournir une protection raisonnable contre le brouillage préjudiciable d'une installation résidentielle.
Cet appareil produit, utilise et peut rayonner de l'énergie de fréquence radio et, s'il n'est pas installé ni utilisé conformément aux instructions, peut causer du brouillage préjudiciable aux communications radios. Toutefois, il n'est pas garanti qu'aucun brouillage préjudiciable puisse se produire dans une situation particulière. Si l'appareil produit du brouillage préjudiciable à la réception radio ou télévisuelle, ce qui peut être déterminé en mettant l'appareil sous tension et hors tension, l'utilisateur devrait essayer d'éliminer le brouillage en prenant l'une ou plusieurs des mesures suivantes :
- Réorienter ou déplacer l'antenne de réception.
- Augmenter l'espace entre l'appareil et le récepteur.
- Brancher l'appareil dans la prise d'un circuit différent de celui du récepteur.
- Consulter le distributeur ou un technicien d'expérience en radio et télévision pour obtenir de l'aide.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet émetteur ne doit pas être placé à de ou utilisé conjointement avec une autre antenne ou un autre émetteur.

Conformité à l'exposition aux RF

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les régles les radioélectriques (RF) de la FCC lignes directrices d'exposition dans le Supplément C à OET65 et d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC. Cet équipement émet une énergie RF trés faible qui est considérée conforme sans évaluation de l'exposition maximale autorisée.
Cependant, cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le dispositif rayonnant et le corps (à l'exception des extrémités : mains, poignets, pieds et chevilles).

Modèle pour les Canadien

REMARQUE :
CAN ICES-3 B/NMB-3 B
Sur les modèles dont la fiche est polarisée :
ATTENTION : POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

ADVERTENCIA:
PARA REDUCIR EL RIESGO DE INCENDIOS O DE DESCARGAS ELÉCTRICAS, NO EXPONGA ESTE APARATO A LA LLUVIA NI A LA HUMEDAD.

PRECAUCIÓN:
PARA REDUCIR EL RIESGO DE DESCARGAS ELÉCTRICAS, NO QUITE LA CUBIERTA (O PANEL POSTERIOR). EN SU INTERIOR NO EXISTE NINGUNA PIEZA QUE PUEDA REPARAR EL USUARIO. EN CASO DE AVERIA, SOLICITE LOS SERVICIOS DE PERSONAL DE REPARACIÓN CUALIFICADO.

El símbolo de rayo con cabeza de flecha, inscrito en un triángulo equilátero, tiene la finalidad de avisar al usuario la presencia de "tensiones peligrosas" no aisladas dentro de la caja del producto que son de magnitud suficiente como para constituir un riesgo de descargas eléctricas a personas

El signo de exclamación, inscrito en un triángulo equilátero, tiene la finalidad de avisar al usuario la presencia de instrucciones importantes de operatión y mantenimiento (reparación) en la literatura que acompaña a este producto.

Instrucciones de seguridad importantes

1. Lea estas instrucciones.
2. Guarde estas instrucciones.
3. Tenga en cuenta todas las advertencias.
4. Siga todas las instrucciones.
5. No use este aparato cerca del agua.
6. Límpielo únicamente con un paño seco.
7. No bloquee los orificios de ventilación. Instálelo siguiendo las instrucciones del fabricante.
8. No lo instale cerca de radiadores, aparatos de calefacción, estufas ni ningún tipo de aparatos (incluyendo amplificadores) que generen calor.
9. Tenga en cuenta los fines de seguridad de los conectores con derivación a masa y / o polarizados. Los conectores polarizados tienen dos contactos, uno de mayor tamaño que el otro. Un conector con derivación a masa tiene dos contactos con un tercero para derivar a masa. El contacto ancho o el tercer contacto se instalan con fines de seguridad. Si el conector del equipo no encaja en la toma de corriente disponible, acuda a un técnico electricista cualificado para que le substituya la toma obsoleta.
10. Evite que el cable de alimentación pueda ser pisado o atrapado, en especial en los conectores, y en los puntos en que sale del aparato.
11. Use sólo los accesorios / conexiones especificados por el fabricante.
12. Use sólo el soporte, trípode, abrazadera o mesa indicados por el fabricante, o vendidos junto con el aparato. Si utiliza una mesilla con ruedas, tenga cuidado, al desplazar el conjunto de mesilla / aparato, ya que si se vuelca podría recibir lesiones.

13. Desconecte este aparato si hay tormenta o cuando no vaya a ser utilizado por largos períodos de tiempo.
14. Deje que el mantenimiento lo lleve a cabo personal cualificado. Es necesario reparar el aparato cuando ha recibido algún tipo de daño, como por ejemplo si el cable de alimentación ha sufrido daños, si se ha derramado algún líquido en el interior del aparato o si éste ha quedado expuesto a la lluvia o humedad y no funciona normalmente o si ha caído al suelo.
15. Daños que requieren reparación
Desenchufe el aparato y solicite los servicios de personal cualificado cuando:
   - **A.** El cable de alimentación o el enchufe esté dañado.
   - **B.** En el interior del aparato hayan entrado objetos sólidos o líquidos.
   - **C.** El aparato haya estado expuesto a la lluvia o al agua.
   - **D.** El aparato parezca no funcionar adecuadamente aunque se sigan las instrucciones de operación. Ajuste solamente los controles indicados en el manual de instrucciones, ya que un ajuste inadecuado podría resultar en daños, y podría requerir el trabajo laborioso de un técnico cualificado para devolver el aparato a su funcionamiento normal.
   - **E.** El aparato haya caído o haya sufrido otros daños, y.
   - **F.** El aparato parezca no funcionar normalmente, indicando que necesita reparación.
16. Introducción de objetos sólidos y líquidos
No introduzca nunca ningún objeto a través de las aberturas del aparato, ya que podrían tocar puntos de tensión peligrosa o cortocircuitar partes, lo que resultaría en un incendio o descargas eléctricas.
El equipo no se debería exponer a gotas ni a salpicaduras y nunca debería colocar objetos que contengan líquidos, como los floreros, encima de éste.
No coloque velas ni otros objetos incandescentes encima de la unidad.
17. Baterías
Tenga en cuenta los aspectos ambientales y siga las regulaciones locales a la hora de desechar las baterías.
18. Si instala el aparato en una instalación empotrada, como en una estantería o en una librería, asegúrese de que esté bien ventilado.
Deje 20 cm de espacio libre por encima y por los lados y 10 cm en la parte posterior. El borde posterior del estante o el tablero de encima del aparato debería estar a unos 10 cm del panel posterior o de la pared, de forma que deje un espacio libre para que el aire caliente pueda circular.

Precauciones

1. **Copyright de las grabaciones—**A menos que se utilice de forma exclusivamente personal, la grabación de material sujeto a copyright es ilegal sin el permiso del propietario del copyright.
2. **Fusible de CA—**El fusible de CA se encuentra en el interior de la unidad y no es un elemento accesible al usuario. Si todavía no puede activar la unidad, póngase en contacto con su distribuidor Onkyo.
3. **Mantenimiento—**De vez en cuando limpie esta unidad con un paño suave. Para la suciedad más difícil de eliminar, use un paño suave ligeramente humedecido con una solución de agua y detergente suave. A continuación, seque la unidad inmediatamente con un paño limpio. No use paños abrasivos, alcohol, ni disolventes químicos de ningún tipo ya que con ellos podría dañar el acabado de la unidad e incluso borrar la serigrafía del panel.
4. **Alimentación**
ATENCIÓN
ANTES DE CONECTAR LA UNIDAD POR PRIMERA VEZ, LEA CON ATENCIÓN LA SECCIÓN SIGUIENTE.
Los voltajes de las tomas de CA varían para cada país. Compruebe que el voltaje de su zona cumpla con los requisitos de voltaje indicados en la etiqueta de características que se encuentra en el panel posterior de esta unidad (por ejemplo, AC 230 V, 50 Hz o AC 120 V, 60 Hz).

El cable de alimentación se utiliza para desconectar esta unidad de la fuente de alimentación de CA. Asegúrese de que el conector esté siempre operativo (fácilmente accesible).

Para modelos con el botón [**POWER**] o con los botones [**POWER**] y [**ON/STANDBY**]:
Al pulsar el botón [**POWER**] para seleccionar el modo OFF no se desconecta totalmente de la red eléctrica. Si no va a utilizar la unidad durante un período de tiempo prolongado, extraiga el cable de alimentación de la toma de red de CA.

Para modelos solo con el botón [**ON/STANDBY**]:
Al pulsar el botón [**ON/STANDBY**] para seleccionar el modo Standby no se desconecta totalmente de la red eléctrica. Si no va a utilizar la unidad durante un período de tiempo prolongado, extraiga el cable de alimentación de la toma de red de CA.

5. **Evitar pérdidas auditivas**
Precaución
Una presión de sonido excesiva de los auriculares de botón y de los auriculares de cabeza puede causar pérdidas auditivas.
6. **Baterías y exposición al calor**
Aviso
Las baterías (paquete de baterías o baterías instaladas) no deben exponerse a un calor excesivo como los rayos del sol, fuego o similar.
7. **Nunca toque esta unidad con las manos húmedas—**Nunca utilice esta unidad ni su cable de alimentación si tiene las manos húmedas o mojadas. Si penetra agua o algún otro líquido en el interior de esta unidad, hágalo revisar por su distribuidor Onkyo.
8. **Notas acerca del manejo de la unidad**
   - Si tiene que transportar esta unidad, use el embalaje original para empaquetarlo de la misma forma en que estaba empaquetado originalmente al adquirirlo.
   - No deje por mucho tiempo objetos de plástico o goma sobre esta unidad ya que, con el tiempo, podrían dejar marcas en la superficie.
   - Después de un uso prolongado, es posible que los paneles superior y posterior de esta unidad se calienten. Esto es normal.
   - Si no va a usar esta unidad por un largo período de tiempo, es posible que al activarla de nuevo no funcione correctamente, por lo que es aconsejable que la utilice de vez en cuando.

Para modelos EE.UU.

Información para el usuario sobre FCC
PRECAUCIÓN:
Los cambios o modificaciones realizados por el usuario que no hayan sido expresamente aprobados por la parte responsable de la conformidad podrían anular la autoridad del usuario para operar el equipo.

NOTA:
Este equipo ha sido probado y ha demostrado que cumple con los límites establecidos para dispositivos digitales de Clase B, de acuerdo con la Parte 15 de las Normas FCC. Estos límites están establecidos para proporcionar una protección razonable frente a las interferencias perjudiciales en una instalación doméstica.
Este equipo genera, utiliza y puede irradiar energía de radiofrecuencia y si no se instala y utiliza de acuerdo con las instrucciones puede causar interferencias perjudiciales a las comunicaciones por radio. Sin embargo, no es posible garantizar que las interferencias no ocurran en una instalación concreta. Si este equipo causa interferencias perjudiciales a la recepción de radio o televisión, lo que puede determinarse apagando y encendiendo el equipo, se aconseja al usuario que intente corregir la interferencia utilizando alguna de las siguientes medidas:
- Reorientar o recolocar la antena receptora.
- Incrementar la distancia entre el equipo y el receptor.
- Conectar el equipo a una toma doméstica de un circuito distinto al del que el receptor está conectado.
- Consulte con el distribuidor o con un técnico de radio/TV para solicitar asistencia.

警告：
為減少火災或電擊的危險，不要將設備暴露在雨中或潮濕的環境中。

注意：
為減少電擊的危險，不要取下設備的外殼（或後蓋）。內部沒有用戶可用的組件。請向合格的技術服務人員諮詢，並尋求幫助。

等邊三角形內帶箭頭的閃電指示標識，用於警告用戶在產品內部有非絕緣的危險電壓存在，可能造成電擊的危險。

等邊三角形內帶驚歎號的指示標識，用於警告用戶存在與設備相關的重要的操作與維護〔服務〕指示信息。

重要的防護措施

1. 閱讀說明。
2. 保存好說明書。
3. 注意所有警告信息。
4. 按照說明進行操作。
5. 不要在靠近水的地方使用本設備。
6. 只能用乾布清潔。
7. 不要擋住通風口，根據廠家的指示說明進行安裝。
8. 不要將設備安裝在熱源附近，如電熱爐，散熱片，爐子，或其他產生熱能的設備。
9. 不要忽視帶極性指示的插頭與接地插頭的安全保護作用，帶極性指示的插頭有兩個插頭片，其中一個比另一個寬。接地插頭有兩個插頭片，和一個接地的插頭。寬插頭片與接地插頭都是為了您的安全設計的。如果隨機提供的插頭無法插入插座內，請求助於電工更換絕緣插座。
10. 防止踩踏電源線，或特別夾捏插頭，方便插頭或從設備接出的連接點。
11. 只使用廠商指定的附件或零件。
12. 只使用廠商指定的或與設備一起出售的推車，架子，三腳架，支架，或桌子。使用推車時，請小心移動裝有設備的推車，防止從車上跌下受損。

13. 閃電或長時間不使用時，請從插座上拔掉設備的插頭。
14. 請向合格的技術服務人員咨詢一切維修的情況，設備受損時要求提供技術服務，如電源線或插頭損壞，潑濺上液體，有物品墜落到設備上，設備淋雨或受潮，無法正常工作，或設備墜落。
15. 需要維修服務的損壞
在以下的情況，請拔掉電源，由合格的維修服務人員進行維修：
   - **A.** 電源線或插頭已損壞。
   - **B.** 物體已掉進或液體已被倒瀉入設備。
   - **C.** 設備被淋雨。
   - **D.** 果設備按照如下指示不能正常操作，只能調整操作說明中包括的控制功能，因為如果調整不當可能導致設備損壞，就需要維修技工花費大量的工作時間將設備恢復到正常的狀態。
   - **E.** 設備曾被跌過或是外殼已被損毀。
   - **F.** 設備似乎不能正常操作，或者顯示出在性能上有明顯的改變。
16. 固體與液體進入機器
應該小心不要讓物體或是液體透過個洞孔倒瀉入外殼。因為可能接觸到電流或帶電部分，導致火災或電擊。
該設備不能置於雨淋或水濺之處，也不能將裝水容器，比如花瓶等置於其上。
17. 電池
注意環保，不要隨意丟棄用過的廢舊電池。
18. 如果設備是內置式安裝，如書櫃或架子上，請確保有足夠的通風。設備頂端和兩側保持 20cm 的高度，後面各保持 10cm 的寬度。設備支架或上方遮板的後邊緣應距離後面板或牆壁 10cm，留出通風散熱的空間。

注意事項

1. **音像版權**—只允許私人使用，沒有經版權所有人許可的任何音像制品的複制與傳播都屬違法。
2. **交流電保險絲**—安裝在本機系列產品中的交流電保險絲是不針對用戶銷售的，如果用戶無法啟動機器，請與 Onkyo 產品經銷商聯系。
3. **保養**—本機系列產品有時需要用軟布擦拭除塵。如遇到頑固的污漬，可用軟布沾取柔和清潔劑的溶液擦拭。清潔後立刻用乾淨的布擦拭乾淨。請勿使用粘性布，稀釋劑，酒精或其他化學溶劑以免損害罩面漆或造成面板字體脫落。
4. **電源**
警告
第一次接通電源之前，請仔細閱讀以下說明。
因為各國之間交流電的電壓不同，請確認您所在地區的電壓與產品後面板上標明的要求相符（例如：AC230V，50Hz，或 AC120V，60Hz）

電源線插頭平時是不連接到交流電源上的。請確認電源插頭是否隨時可以使用（很方便地插上）。

針對具有 [**POWER**] 按鈕，或同時具有 [**POWER**] 和 [**ON/STANDBY**] 按鈕的機型：
按下 [**POWER**] 按鈕選擇 OFF 模式時，不會完全切斷電源。如果您預計長時間不會使用本裝置，請將電源線從交流電插座拔下。

針對僅具有 [**ON/STANDBY**] 按鈕的機型：
按下 [**ON/STANDBY**] 按鈕選擇待機模式時，不會完全切斷電源。如果您預計長時間不會使用本裝置，請將電源線從交流電插座拔下。

5. **預防收聽失真**
注意
來自耳機和聽筒的過分聲壓會導致聲音失真。
6. **電池與散熱**
警告
電池（電池包裝或電池安裝）不要放置在強光暴曬，火源等過熱的地方。
7. **嚴禁濕手觸摸機器**－濕手狀態下，嚴禁接觸機器或機器的電源連接線。如有水或其他液體進入機器，請與 Onkyo 的經銷商聯繫進行檢修。
8. **搬運注意事項**
   - 如需要運輸設備，請使用原包裝材料，按照購買時的包裝方式進行包裝。
   - 不要將橡膠或塑料物品擱置在設備上時間過久，因為可能會在設備外殼上留下印記。
   - 超長時間使用時，設備的頂部和後部面板會發熱，屬於正常情況。
   - 如果長時間不使用設備，再次開機時可能會工作不正常，請保證定期使用。

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Important Notice Regarding Software

The software package installed in this product includes software licensed to Onkyo Corporation (hereinafter, called "Onkyo") directly or indirectly by third party developers. Please be sure to read this notice regarding such software.

Notice Regarding GNU GPL/LGPL-applicable Software

This product includes the following software that is covered by GNU General Public License (hereinafter, called "GPL") or by GNU Lesser General Public License (hereinafter, called "LGPL").
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Package List
パッケージリスト

linux	uClibc	busybox
libgcc	libstdc++	libmms
compat-wireless	wpa_supplicant	mdns-repeater
libiconv	bluez	dbus
iperf		

これらのソースコードのご提供に関しましては 、コールセンターにお問い合わせください。
なお、ソースコードの中身についてのお問い合わせはご遠慮ください。

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Version 2.1, February 1999

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[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library. To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the means to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may choose to apply the GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the Library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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3. [3]Viraj Bais <vbais@mailman1.intel.com> and [4]Clayton Kirkwood <kirkwood@striderfm.intel.com> port to WindowsNT 3.5
4. [5]Michael Barone <michael.barone@lmco.com> GPSVME fixes
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30. [33]Lars H. Mathiesen <thorinn@diku.dk> adaptation of foundation code for Version 3 as specified in RFC-1305
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40. [44]Wilfredo Sanchez <wsanchez@apple.com> added support for NetInfo
41. [45]Nick Sayer <mrapple@quack.kfu.com> SunOS streams modules
42. [46]Jack Sasportas <jack@innovativeinternet.com> Saved a Lot of space on the stuff in the html/pic/ subdirectory
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45. [49]Jeff Steinman <jss@pebbles.jpl.nasa.gov> Datum PTS clock driver
46. [50]Harlan Stenn <harlan@pfcs.com> GNU automake/autoconfigure makeover, various other bits (see the ChangeLog)
47. [51]Kenneth Stone <ken@sdd.hp.com> HP-UX port
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(19) Tremolo

http://wss.co.uk/pinknoise/tremolo

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Onkyo USA Corporation Limited Consumer Warranty (USA)

PLEASE RETAIN YOUR ORIGINAL BILL OF SALE AS YOU WILL NEED TO PRESENT IT SHOULD YOU REQUIRE SERVICE UNDER THIS WARRANTY.
Onkyo USA Corporation (hereinafter referred to as Onkyo) hereby warrants all Onkyo brand products **PURCHASED DIRECTLY FROM Onkyo OR FROM AN INDEPENDENT Onkyo AUTHORIZED DEALER in the UNITED STATES,**
in accordance with the following terms and conditions:

WARRANTY PERIOD (from date of purchase):

New Products:	
Receivers and Amplifiers	2 years Parts & Labor
DVD Players, Tuners and Speakers	2 years Parts & Labor
CD Players, Cassette Decks, Personal Audio Systems	1 year Parts & Labor
Multimedia Products, Audio/Video Accessories	1 year Parts & Labor
Refurbished Products:	
Receivers, Amplifiers, Tuners, Processors, CD, DVD Players, Speaker Systems, Mini Systems	1 year Parts & Labor

SCOPE OF WARRANTY

From the date of original consumer purchase and for the respective periods specified above, Onkyo agrees to repair, at its sole expense, all Onkyo brand products purchased directly from Onkyo or from an Independent Onkyo Authorized Dealer, which are defective in material and/or workmanship during ordinary consumer use. Repairs may be completed using new or refurbished parts that meet or exceed Onkyo specifications for new parts. Onkyo, at its sole discretion, may replace a product, with a refurbished or reconditioned unit having comparable features and a limited consumer warranty.

EXCLUSIONS:

IF YOU PURCHASE AN Onkyo BRAND PRODUCT FROM AN UNAUTHORIZED DEALER, YOUR Onkyo WARRANTY MAY NOT BE VALID, please use our authorized dealer locator.

This Warranty does not apply with respect to or cover the following:

1. Defects or damage caused by accident, fire/smoke, flood/water damage, power surge (or related electrical abnormalities), lightning or other acts of nature.
2. Defects or damage caused by abuse, misuse, negligence, accident, unauthorized product modification or service, or failure to observe the instructions contained in the manual furnished at the time of original purchase.
3. Deterioration/failure due to corrosive atmosphere, including but not limited to; smoke, high humidity or extreme temperature.
4. Damage caused during shipment or handling.
5. Products purchased from anyone other than Onkyo or an Independent Onkyo Authorized Dealer. If you are uncertain as to whether a dealer is authorized, please contact Onkyo's Customer Relations Department or check the **Dealer and Service Locator**.
6. Products that have had their serial numbers altered or removed.
7. Products purchased in "AS IS" condition or noted as "DEMO", "DISPLAY", "OPEN BOX", or "CLEARANCE".
8. Products that have been altered or repaired by anyone other than Onkyo or an Onkyo authorized independent service station in a manner that has affected their performance, stability or reliability.
9. Accessories attached to or to be used with Onkyo products, such as antennas, batteries, cables, etc.
10. Any product attached to or used with the Onkyo Product.
11. Packing materials and cosmetic items.
12. Parts which have prescribed useful lives dependent upon the degree of their use, such as styli, cassette heads, idler wheels, batteries, etc.
13. Installation and removal of Onkyo products, setup, adjustments or signal reception issues.
14. Maintenance, cleaning or periodic check-ups.
15. Adjustments or alterations required for compatibility with conditions pertaining to foreign countries.

OBTAINING WARRANTY SERVICE:

To obtain warranty service, take or ship your Onkyo product to an Onkyo Authorized Independent Service Center, together with a note describing your complaint and your copy of the dated purchase receipt. Repairs are not performed at our headquarters; all repairs must be performed by our Onkyo Authorized Independent Service Centers. For a list of Onkyo Authorized Independent Service Centers please go to; **www.onkyousa.com**, under, **Support**. Please also include in any mailing; a contact name, address and email address or telephone number. If you choose to ship your Onkyo product to an Onkyo Authorized Independent Service Center, all shipping arrangements must be made by you and all shipping charges and insurance must be fully prepaid. Any Onkyo product shipped in its entirety must be properly packaged to avoid shipping damage. Any shipping damage incurred as a result of improper or insufficient packaging will be the responsibility of the shipper. Onkyo will pay all return shipping charges for Onkyo products that have been serviced under this warranty. Any service or repair for items not covered by this limited warranty shall be at the Authorized Independent Service Center's rates and terms then in effect. Contact an Onkyo Authorized Independent Service Center for details.

LIMITATIONS:

Onkyo makes this warranty subject to the following limitations:

1. This limited Warranty is valid only within the continental United States of America, Hawaii and Alaska. To be covered by this warranty the Onkyo product concerned must have been purchased directly from Onkyo or an Independent Onkyo Authorized Dealer and the person seeking warranty service must reside in one of the states of the United States of America or in the District of Columbia. This warranty extends only to the original retail purchaser and cannot be transferred to anyone.
2. Onkyo SHALL HAVE NO LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE RESPONSIBILITY OF Onkyo UNDER THIS WARRANTY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE Onkyo PRODUCTS BY Onkyo OR ITS AUTHORIZED INDEPENDENT SERVICE CENTERS.
3. This warranty is valid only with respect to repairs affected by Onkyo or an Onkyo authorized independent service center.
4. ALL WARRANTIES OTHER THAN THE EXPRESS WARRANTY HEREIN CONTAINED INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

Onkyo USA Corporation Consumer Warranty (Canada)

PLEASE RETAIN YOUR ORIGINAL BILL OF SALE AS YOU WILL NEED TO PRESENT IT SHOULD YOU REQUIRE SERVICE UNDER THIS WARRANTY.
Onkyo USA Corporation (hereinafter referred to as Onkyo) hereby warrants all Onkyo brand products **PURCHASED DIRECTLY FROM Onkyo OR FROM AN INDEPENDENT Onkyo AUTHORIZED DEALER IN CANADA,**
in accordance with the following terms and conditions:

WARRANTY PERIOD (from date of purchase):

New Products:	
Receivers and Amplifiers	2 years Parts & Labor
DVD Players, Tuners and Speakers	2 years Parts & Labor
CD Players, Cassette Decks, Personal Audio Systems	1 year Parts & Labor
Multimedia Products, Audio/Video Accessories	1 year Parts & Labor
Refurbished Products:	
Receivers, Amplifiers, Tuners, Processors, CD, DVD Players, Speaker Systems, Mini Systems	1 year Parts & Labor

SCOPE OF WARRANTY

From the date of original consumer purchase and for the respective periods specified above, Onkyo agrees to repair, at its sole expense, all Onkyo brand products purchased directly from Onkyo or from an Independent Onkyo Authorized Dealer in Canada, which are defective in material and/or workmanship during ordinary consumer use. Repairs may be completed using new or refurbished parts that meet or exceed Onkyo specifications for new parts. Onkyo, at its sole discretion, may replace a product, with a refurbished or reconditioned unit having comparable features.

EXCLUSIONS:

IF YOU PURCHASE AN Onkyo BRAND PRODUCT FROM AN UNAUTHORIZED DEALER, YOUR Onkyo WARRANTY MAY NOT BE VALID, please use our authorized dealer locator.

This Warranty does not apply with respect to or cover the following:

1. Defects or damage caused by accident, fire/smoke, flood/water damage, power surge (or related electrical abnormalities), lightning or other acts of nature.
2. Defects or damage caused by abuse, misuse, negligence, accident, unauthorized product modification or service, or failure to observe the instructions contained in the manual furnished at the time of original purchase.
3. Deterioration/failure due to corrosive atmosphere, including but not limited to; smoke, high humidity or extreme temperature.
4. Damage caused during shipment or handling.
5. Products purchased from anyone other than Onkyo or an Independent Onkyo Authorized Dealer. If you are uncertain as to whether a dealer is authorized, please contact Onkyo's Customer Relations Department or check the **Dealer and Service Locator.**
6. Products that have had their serial numbers altered or removed.
7. Products purchased in "AS IS" condition or noted as "DEMO", "DISPLAY", "OPEN BOX", or "CLEARANCE".
8. Products that have been altered or repaired by anyone other than Onkyo or an Onkyo authorized independent service station in a manner that has affected their performance, stability or reliability.
9. Accessories attached to or to be used with Onkyo brand products, such as antennas, batteries, cables, etc.
10. Any product attached to or used with the Onkyo brand product.
11. Packing materials and cosmetic items.
12. Parts which have prescribed useful lives dependent upon the degree of their use, such as styli, cassette heads, idler wheels, batteries, etc.
13. Installation and removal of Onkyo brand products, setup, adjustments or signal reception issues.
14. Maintenance, cleaning or periodic check-ups.
15. Adjustments or alterations required for compatibility with conditions pertaining to foreign countries.
16. Loss of, damage to or corruption of stored program or data.

OBTAINING WARRANTY SERVICE:

To obtain warranty service, take or ship your Onkyo brand product to an Onkyo Authorized Independent Service Center, together with a note describing your complaint and your original dated purchase receipt. Repairs are not performed at our headquarters; all repairs must be performed by our Onkyo Authorized Independent Service Centers. For a list of Onkyo Authorized Independent Service Centers please go to; **www.onkyo.ca**, under, **Support**. Please also include in any mailing; a contact name, address and email address or telephone number. If you choose to ship your Onkyo brand product to an Onkyo Authorized Independent Service Center, all shipping arrangements must be made by you and all shipping charges and insurance must be fully prepaid. Any Onkyo brand product shipped must be properly packaged to avoid shipping damage. Any damage incurred as a result of improper or insufficient packaging will be the responsibility of the customer or the shipper. Onkyo will pay all return shipping charges for Onkyo brand products that have been serviced under this warranty. Any service or repair for items not covered by this limited warranty shall be at the Authorized Independent Service Center's rates and terms then in effect. Contact an Onkyo Authorized Independent Service Center for details.

LIMITATIONS:

Onkyo makes this warranty subject to the following limitations:

1. This limited Warranty is valid only within Canada. To be covered by this warranty the Onkyo brand product concerned must have been purchased directly from Onkyo or an Independent Onkyo Authorized Dealer in Canada and the person seeking warranty service must reside in Canada. This warranty extends only to the original retail purchaser meeting the above requirements and cannot be transferred to anyone.
2. Onkyo SHALL HAVE NO LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS, DEEMED OR IMPLIED WARRANTY OR CONDITION, OR FOR LOSS OF, DAMAGE TO OR CORRUPTION OF ANY PROGRAM OR DATA STORED IN OR USED WITH THE PRODUCT. THE RESPONSIBILITY OF Onkyo UNDER THIS WARRANTY IS AND SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE Onkyo PRODUCTS BY Onkyo OR ITS AUTHORIZED INDEPENDENT SERVICE CENTERS.
3. This warranty is valid only with respect to repairs made by Onkyo or an Onkyo authorized independent service center.
4. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED CONDITION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR DEEMED CONDITION OR WARRANTY UNDER APPLICABLE CONSUMER LAW, IS LIMITED IN DURATION TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

Some jurisdictions do not allow limitations on how long an implied warranty lasts and some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from jurisdiction to jurisdiction.

Garantie d'Onkyo USA Corporation (Canada)

VEUILLEZ CONSERVER VOTRE FACTURE ORIGINALE PUISQUE VOUS DEVREZ LA PRÉSENTER POUR VOUS PRÉVALOIR DU SERVICE AUX TERMES DE LA PRÉSENTE GARANTIE. Onkyo USA Corporation (ci-après appelée Onkyo) garantit tous les produits de marque Onkyo ACHETÉS DIRECTEMENT AUPRÈS D'ELLE OU D'UN MARCHAND INDÉPENDANT AUTORISÉ AU CANADA, conformément aux modalités et conditions suivantes :

PÉRIODE DE GARANTIE (à compter de la date d'achat):

Nouveaux produits :	
Récepteurs et amplificateurs	2 ans pièces et main-d'œuvre
Lecteurs DVD, syntoniseurs et haut-parleurs	2 ans pièces et main-d'œuvre
Lecteurs CD, platines à cassettes, systèmes audio personnels	1 an pièces et main-d'œuvre
Produits multimédias, accessoires audio/vidéo	1 an pièces et main-d'œuvre
Produits remis à neuf :	
Récepteurs, amplificateurs, syntoniseurs, processeurs, lecteurs CD, lecteurs DVD, systèmes de haut-parleurs, minichaînes	1 an pièces et main-d'œuvre

PORTÉE DE LA GARANTIE

À compter de la date de l'achat initial et durant les périodes précisées ci-dessus, Onkyo accepte de réparer, à ses frais, tous les produits de marque Onkyo achetés directement auprès d'elle ou d'un marchand indépendant autorisé Onkyo au Canada qui présentent des vices de matériaux et/ou de fabrication au cours de l'utilisation normale. Les réparations peuvent être effectuées au moyen de pièces neuves ou remises à neuf qui respectent ou dépassent les spécifications établies par Onkyo pour les pièces neuves. Onkyo, à son entière discrétion, peut remplacer un produit par une unité remise à neuf ou remise en état ayant des caractéristiques comparables.

EXCLUSIONS:

SI VOUS ACHETEZ UN PRODUIT DE MARQUE Onkyo AUPRÈS D'UN MARCHAND NON AUTORISÉ, VOTRE GARANTIE D'Onkyo POURRAIT NE PAS ÊTRE VALIDE; veuillez utiliser notre localisateur de marchand autorisé.

La présente garantie ne s'applique pas à l'égard des éléments suivants:

1. Les défectuosités ou les dommages causés par un accident, un incendie ou de la fumée, une inondation ou de l'infiltration d'eau, une saute de puissance (ou des anomalies électriques connexes), la foudre ou d'autres calamités naturelles.
2. Les défectuosités ou les dommages causés par un usage abusif, une mauvaise utilisation, un accident, une modification ou un entretien non autorisé du produit ou le défaut de suivre les instructions du manuel fourni au moment de l'achat initial.
3. Une détérioration/défaillance en raison d'une atmosphère corrosive, notamment de la fumée, un taux élevé d'humidité ou une température extrême.
4. Les dommages causés au cours de la livraison ou la manutention.
5. Les produits achetés auprès d'une personne autre que Onkyo ou qu'un marchand indépendant autorisé Onkyo. Si vous ignorez si un marchand est autorisé, veuillez communiquer avec le service à la clientèle d'Onkyo ou consulter le **localisateur de marchand et de centre de service**.
6. Les produits dont le numéro de série a été modifié ou effacé.
7. Les produits achetés « TEL QUEL » ou identifiés comme « DÉMONSTRATEUR », « MODÈLE DU PRÉSENTOIR », « BOÎTE OUVERTE » ou « LIQUIDATION ».
8. Les produits qui ont été modifiés ou réparés par une personne autre que Onkyo ou qu'un centre de service indépendant autorisé Onkyo de façon à affecter leur rendement, leur durabilité ou leur fiabilité.
9. Les accessoires attachés aux produits de marque Onkyo ou devant être utilisés avec ceux-ci, comme les antennes, les piles, les câbles, etc.
10. Tout produit attaché au produit de marque Onkyo ou devant être utilisé avec celui-ci.
11. Les matériaux d'emballage et les éléments de présentation.
12. Les pièces qui ont une durée de vie utile prescrite en fonction de leur utilisation, comme les stylets, les têtes de lecture, les engrenages, les piles, etc.
13. L'installation et le démontage des produits de marque Onkyo, la configuration, les ajustements ou les problèmes de réception du signal.
14. L'entretien, le nettoyage ou les mises au point périodiques.
15. Les ajustements ou les modifications nécessaires pour assurer la conformité aux normes de pays étrangers.
16. La perte ou la corruption de données ou de programmes stockés ou les dommages à ceux-ci.

EXÉCUTION DE LA GARANTIE:

Pour faire exécuter la garantie, veuillez remettre ou expédier votre produit de marque Onkyo à un centre de service indépendant autorisé Onkyo, avec une note décrivant le problème et votre reçu d'achat original daté. Les réparations ne sont pas effectuées à notre siège social; toutes les réparations doivent être effectuées par nos centres de service indépendants autorisés Onkyo. Pour consulter une liste des centres de service indépendants autorisés Onkyo, veuillez aller au **www.onkyo.ca**, sous l'onglet **Support**. Veuillez également inclure dans tout envoi postal le nom de la personne à joindre, son adresse et son courriel ou son numéro de téléphone. Si vous choisissez d'expédier votre produit de marque Onkyo à un centre de service indépendant autorisé Onkyo, vous devez prendre les dispositions nécessaires pour assurer la livraison et régler d'avance l'ensemble des frais et des assurances liés à la livraison. Tout produit de marque Onkyo expédié doit être emballé de façon appropriée pour éviter les dommages causés en cours d'expédition. Le consommateur ou l'expéditeur sera responsable à l'égard de tous dommages subis en raison d'un emballage inapproprié ou insuffisant. Onkyo paiera la totalité des frais d'expédition de retour pour les produits de marque Onkyo dont la garantie a été exécutée. Les services fournis ou les réparations effectuées à l'égard d'éléments qui ne sont pas couverts par la présente garantie limitée seront effectués selon les tarifs et les modalités en vigueur du centre de service indépendant autorisé. Pour obtenir plus de détails, communiquez avec un centre de service autorisé Onkyo.

LIMITATIONS:

Onkyo donne la présente garantie sous réserve des limitations suivantes :

1. La présente garantie limitée n'est valide qu'au Canada. Pour être couvert par la présente garantie, le produit de marque Onkyo en cause doit être acheté directement auprès d'Onkyo ou d'un marchand indépendant autorisé Onkyo au Canada et la personne qui désire se prévaloir de la garantie doit être un résident du Canada. La présente garantie ne vise que l'acheteur d'origine respectant les exigences susmentionnées et elle ne peut être cédée à une autre personne.
2. Onkyo N'ASSUME AUCUNE RESPONSABILITÉ DE QUELQUE NATURE QUE CE SOIT EN CAS DE DOMMAGES SPÉCIAUX, CONSÉCUTIFS OU INDIRECTS EN RAISON DE LA VIOLATION D'UNE GARANTIE OU CONDITION EXPLICITE, RÉPUTÉE OU IMPLICITE, OU DE LA PERTE, DE L'ENDOMMAGEMENT OU DE LA CORRUPTION DE TOUTE DONNÉE OU TOUT PROGRAMME STOCKÉ DANS LE PRODUIT OU UTILISÉ AVEC CELUI-CI. LA RESPONSABILITÉ D'Onkyo AUX TERMES DE LA PRÉSENTE GARANTIE SE LIMITE À LA RÉPARATION DES PRODUITS Onkyo DÉFECTUEUX PAR Onkyo OU PAR SES CENTRES DE SERVICE INDÉPENDANTS AUTORISÉS.
3. La présente garantie n'est valide qu'à l'égard des réparations effectuées par Onkyo ou par un centre de service indépendant autorisé Onkyo.
4. SAUF DANS LA MESURE INTERDITE PAR LES LOIS APPLICABLES, TOUTES LES CONDITIONS OU GARANTIES IMPLICITES DE QUALITÉ MARCHANDE OU DE CONVENANCE À UNE FIN PARTICULIÈRE OU TOUTES LES CONDITIONS OU GARANTIES RÉPUTÉES EN VERTU DES LOIS APPLICABLES SUR LA PROTECTION DES CONSOMMATEURS SONT D'UNE DURÉE LIMITÉE CONFORMÉMENT À LA DURÉE DE LA GARANTIE APPLICABLE SUSMENTIONNÉE.

Certains territoires n'autorisent aucune restriction sur les garanties implicites ni l'exclusion ou la limitation des dommages consécutifs ou indirects de sorte que les limitations ou les exclusions susmentionnées pourraient ne pas s'appliquer dans votre cas. La présente garantie vous confère des droits précis et vos droits pourraient varier selon les territoires.

ONKYO

Product Registration (USA and Canada)

Product Registration

Thank you for purchasing this Onkyo product. In order to protect your investment and to receive information on new products and updates, please register. Please visit our web site for your online registration at:

www.us.onkyo.com/prodreg_form.cfm (For USA customers)
www.onkyo.ca/prodreg_form.cfm (For Canadian customers)

Online Customer Support

www.onkyousa.com can assist you anytime with Frequently Asked Questions, Hookup Diagrams, and Service Information.
www.onkyo.ca is available for Canadian customer

We offer Product Support 7 days per week

Onkyo has extended its product support hours to a seven-day schedule. For questions, assistance, or comments, please call us or visit on our website at:

Tel 1-800-229-1687

Web **www.onkyousa.com/support** (For USA customers)
www.onkyo.ca/support (For Canadian customers)

Onkyo USA Corporation
18 Park Way, Upper Saddle River, NJ 07458
Phone: 201-785-2600 Fax: 201-934-7823

Enregistrement du produit (États Unis et Canada)

Enregistrement du produit

Nous vous remercions d'avoir acheté ce produit Onkyo. Pour protéger votre investissement et pour recevoir de l'information sur nos nouveaux produits ainsi que des mises à jour, veuillez enregistrer votre produit. Pour ce faire, consultez notre site Web aux adresses suivantes :

www.us.onkyo.com/prodreg_form.cfm (pour les clients des États Unis)
www.onkyo.ca/prodreg_form.cfm (pour les clients du Canada)

Soutien à la clientèle en ligne

Vous pouvez obtenir de l'aide en tout temps sur le site **www.onkyousa.com** en consultant les sections *Frequently Asked Questions, Hookup Diagrams* et *Service Information*. Les clients canadiens peuvent quant à eux consulter le site **www.onkyo.ca**.

Nous offrons un soutien technique 7 jours sur 7

Onkyo offre maintenant un soutien technique 7 jours sur 7. Pour obtenir de l'aide, des réponses à vos questions, ou pour soumettre vos commentaires, veuillez communiquer avec nous par téléphone ou consulter notre site Web :

Téléphone 1-800-229-1687

Sites Web **www.onkyousa.com/support** (pour les clients des États Unis)
www.onkyo.ca/support (pour les clients du Canada)

Onkyo USA Corporation
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